

Freedom VMS Server – Manual V3.3



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Freedom Server Requirements

Note: CPU and RAM requirements subject to quantity & stream parameters of cameras being displayed simultaneously and recorded.

Please ensure you have the latest graphics card drivers installed and the Freedom application is setup to run as an 'administrator'

Note: The GUI is optimized for wide screen 16:9 or 16:10 displays

! Important: It is highly recommended that the PC running Freedom Server be attached to a UPS.

Minimum Server Requirements

System Element	System Requirements
Processor	Intel i3+ (Dependant on the number of cameras, resolution & Bitrate)
Main Memory	At least 3 GB RAM
Hard Disk Capacity	At least 10GB free space
CD/DVD ROM	24 X or greater
Sound Card	16bit Stereo or higher
Graphics Card	1024 x 768px resolution, 24 bit colour 128MB RAM.
Display Monitor	17 inch or higher (2 monitors are required for eMap functionality)
LAN	Ethernet 1000 BaseT or compatible
Operating System	Windows XP 32bit with SP2+, Windows 7 32bit (admin rights)

Standard Server Requirements

System Element	System Requirements
Processor	Intel i5 (Quad core) or Higher
Main Memory	4GB+ of RAM
Hard Disk Capacity	At least 10GB free space
CD/DVD ROM	32 X or greater
Sound Card	16bit Stereo or higher
Graphics Card	1920 x1080px resolution or higher, 32 bit colour 1GB RAM.
Display Monitor	19 inch or higher (2 monitors are required for eMap functionality)
Conventional Mouse	For easy eMap dragging functionality.
LAN	Ethernet 1000 BaseT or compatible
Operating System	Windows 7 Pro 64bit (administrator rights) (connect to gigabit port on switch)

Performance Server Requirements

System Element	System Requirements
Processor	Intel i7 (Quad core) or Higher
Main Memory	8GB+ of RAM
Hard Disk Capacity	At least 10GB free space
CD/DVD ROM	32 X or greater
Sound Card	16bit Stereo or higher
Graphics Card	Dedicated 1920 x 1080 resolution or higher, 32 bit colour 2GB RAM.
Display Monitor	23 inch wide screen monitor or higher (2 monitors required for eMap functionality)
Conventional Mouse	For easy eMap dragging functionality.
LAN	Ethernet 1000 BaseT or compatible (connect to gigabit port on switch)
Operating System	Windows 7 Pro 64bit (administrator rights)

Features

The Freedom VMS software is built on the MP-CCTV (Multi-Platform CCTV) which supports all current CCTV technologies. The Freedom VMS supports a simple and affordable upgrade path to HD regardless of cable infrastructure or CCTV under a one unified software platform.

Freedom also supports synchronized playback from multiple recorders across multiple manufacturers.

Note 1: Some devices require a licenced dongle, a dongle is a small USB device containing licensing information.

Note 2: Any references made to Windows 8™ throughout this manual refer to the full version NOT the RT versions.

- eMap navigation on Playback & Live view
- Alarm handling from Omega DVRs, NVRs
- Digital zoom & drag on Live view, Playback and local player
- Automatic on-site/offsite stream and address selection (Main/sub) via dual IP address Private/Public
- Unique low retention warning and logging system to ensure maximum CCTV regulations compliance
- Choice of SD, 960H & HD resolutions under one platform allowing easy migration to HD technologies
- Seamlessly connect to multiple recorders from multiple manufacturer over multiple sites
- Extensive Health diagnostic status reports,
- Edge recording Health diagnostics status and solar battery status. (Freedom Client only)
- Remote edge recording and playback from compatible SD and MicroSD enabled devices. (Freedom Client only)
- Synchronised playback of multiple cameras from multiple brands of recorders across multiple sites.
- Push/synchronize time between devices at a specific time each day
- Ability to hide cameras from being displayed. (Feature useful in applications of a covert nature)

Supported Devices and Manufacturers

Freedom VMS is compatible with all current CCTV technologies across multiple manufacturer brands.

Connection is licence free for Freedom Pro Servers, Freedom Lite Servers, Omega embedded recorders and Maxima embedded recorders.

Freedom VMS is also compatible with hundreds of other 3rd party embedded recorder models.

Licence costs are P.O.A

Navigate visually using eMaps with customizable camera icons (not just the static up/down side cameras)

Freedom also has a feature known as '**e-Map playback**' which allows the selection of cameras via a visual e-map representation of the site. This feature is great for users who may be unfamiliar with the location or description of the cameras. This also aids in the tracking of events leading up to an incident.

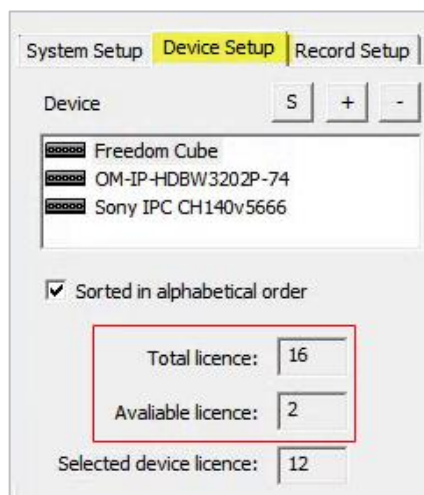
Freedom Server Licencing

Freedom VMS includes a flexible licensing model that allows you to 'de-select' an analogue or HD-SDI camera from recording via a capture card and add an IP camera in its place at no extra licensing cost.

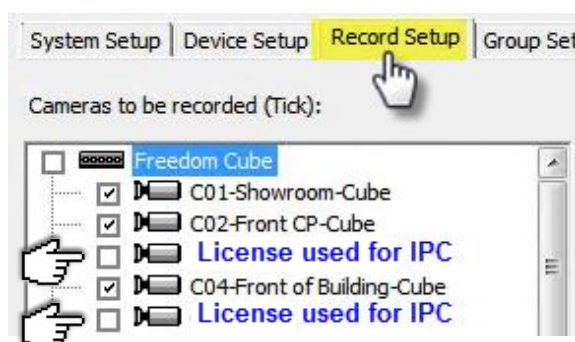
License increments on Freedom **Pro** version can be incremented by '1' (64 maximum).

License increments on Freedom **Lite** must be in increments of '6' (6,12,18,24,30) (30 maximum).

To view how many licences you currently have, click on the 'Setup' icon then click on the 'Device Setup' tab as pictured below, this display your total licence and any available (spare) licenses.



If you wish to swap an analogue capture card licence for a HD IP camera simply un-tick the analogue camera/s channel from recording in the 'Record Setup' tab, then add a compatible IP camera in 'Device Setup'



Supporting Quick Guides & Training


In addition to this manual there are a number of 'quick guides' available, which are short 1 or 2 page guides on how to perform common tasks within the Freedom VMS. Printing these guides out helps users quickly learn common tasks without having to dig for information in larger manuals. Some of these 'quick guides' are attached to the end of this manual.

Others that are available for download include. **Freedom VMS Installation Guide**, **Installing eMaps**

There are also video training tutorials available online at www.freedomvms.com/tutorials

The QR code on the live view screen is intended to provide quick access to the online video tutorials via a smartphone or tablet in situation where the PC your using the Freedom VMS software on does not have internet access or audio enabled.



The  icon indicates that there is a video tutorial is available for the topic.

Installation

If you have a previous version of Freedom Server, please backup your current configuration. The backup and restore procedure is covered under the '*Backing up a FreedomVMS configuration*' section of this manual.

After you have completed your backup, uninstall your current version, and reboot the recorder.

Once you have backed-up and uninstalled your previous version, open the folder containing "**Freedom Server**", double click "**Setup.exe**" and follow the prompts. A Freedom Server icon will automatically be placed on the desktop and in the start-up folder.



Allowing firewall Access

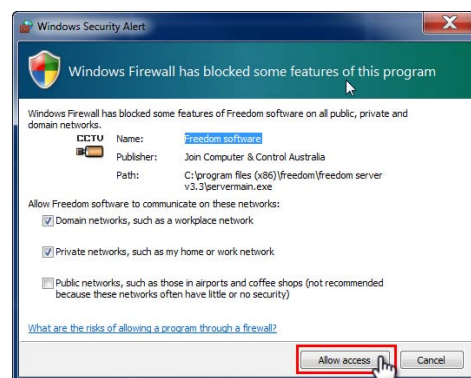
Firewall exceptions are created automatically when you install Freedom Server.

If remote access is still being blocked you may need to create public & private firewall exceptions for the following applications

'**FreedomSvr.exe**', '**TransCodeServer.exe**'

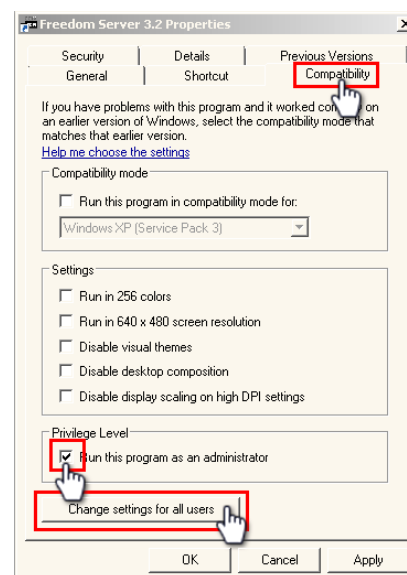
The application is located in the following location;

C:\Program Files (x86)\Freedom\Freedom Server V3.x



Run as Administrator

After installing Freedom Server, '**Right**' click over the 'Freedom Server' icon on desktop and from the pop up list click '**Properties**', then click the '**Compatibility**' tab (Fig 1.0A). From this window 'tick' the '**Run this program as an administrator** box (Fig 1.0B). Click '**OK**'. Repeat this process for all executable files in the '**C:\Program Files (x86)\Freedom\Freedom Server V3.3**' folder and repeat for all user accounts on the Server, use '**change settings for all users**' option.



Ethernet connectivity

If server is recording a larger number of HD cameras, it is recommended that both the Ethernet connection on the PC and the port of the switch that the server/s is connected to be Gigabit rated and the patch cable between the two be Cat5e or better.

Switch stacking (Large IP system only)


On large IP systems where multiple switches are required the ports used to link each switch should be a fibre / Gigabit connection.

Steps for setting up a Freedom Server

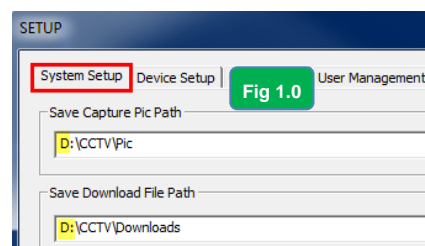
1. Plug in licensing dongle (USB module)
2. Install Freedom Server Software
3. Add / prepare hard disks that will be used to record footage using '**Disk Management**' tool under start menu.
4. Add device/s which may include Analogue cards, IP cameras, encoders, Freedom Servers...and configure
5. Select (tick) the cameras you wish to record from each device
6. Configure your **recording Schedule/s** (default 'Schedule 1' is 24 hours 7 days a week, recording mode 'Normal'
7. Assign recorded cameras to selected hard disk drive/s (default is use all disks for recording)



Preparing hard disks for recording.

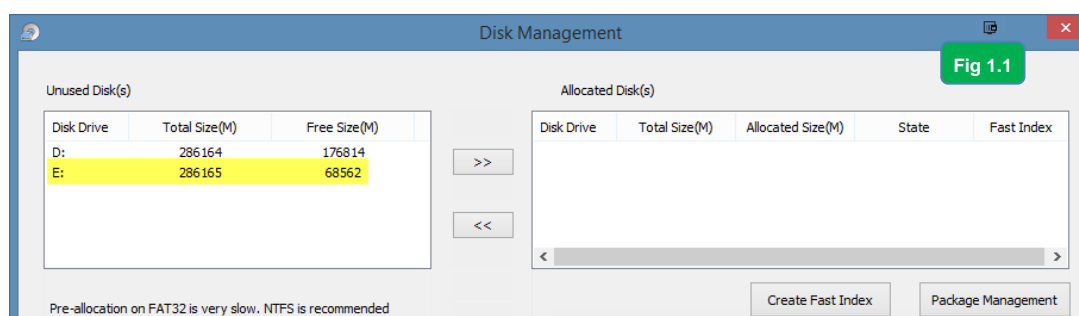
Before you can setup recording schedules you need to prepare and select which hard disks you wish to record video footage on. Follow these steps to do so.

1. In Windows format your recording drives. (A 'full' format is recommended)
2. Close Freedom Server software if currently running.
3. On the Windows Start menu navigate to 'All Programs' → 'Freedom Server 3.3' → 'Disk Management' 
4. Enter an administrator username and password (default username is 'admin' default password is left blank).
5. This opens the 'Disk Management' window (**Fig 1.1**)

Important ! When building and configuring a Freedom Server it is highly recommended that you dedicate 1 hard disk drive or partition **exclusively** for 'User downloads', and the default download locations in Freedom setup should reflect this See **Fig 1.0**. Drive 'D' is the recommended letter to assign to this drive using the 'Windows Disk Manager' application. ('diskmgmt.msc')



To select a recording disk you simply click to highlight the disk you wish to be used as a recording disk from the left hand 'Unused Disks' window pane, then click on the include  icon. The disk should now appear on the right hand 'Allocated Disks' section. In the example below drive 'E' is the drive we wish to add, we will not be adding drive 'D' because we are using this drive exclusively for User downloads. Each disk takes about 2 minutes to prepare depending on size. Disks can also be removed from the 'Allocated Disk' section by highlighting the disk and clicking the  icon. When finished click on the 'X' button to close window.



Fast Index

The 'Create Fast Index' button allows you to create a 'Fast index' which re-organizes the recording hard disk drives to improve Freedom Server search times when searching for footage.

A 'Fast index' is created whenever a new disk is allocated in 'Disk Management'.

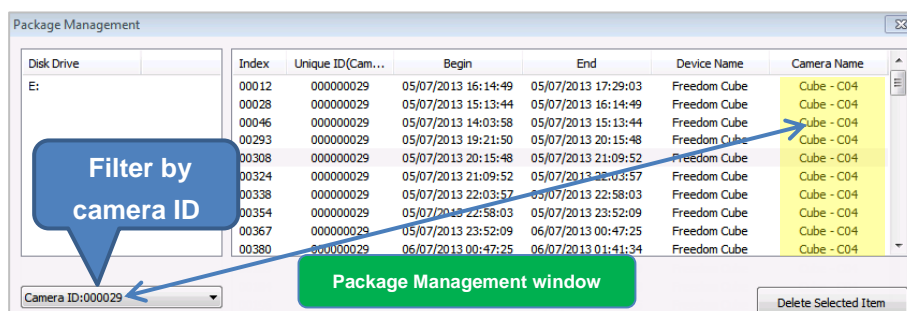
If upgrading from a Freedom Server with a build date prior to 20140509, a 'Fast Index' should be created.

Creating a 'fast index' will take approximately 1 minute per Terabyte to complete.

Deleting camera footage

Clicking the 'Package Management' button allows you to delete files for a specific camera or disk.

You can click the 'Camera ID' dropdown to filter files by camera.

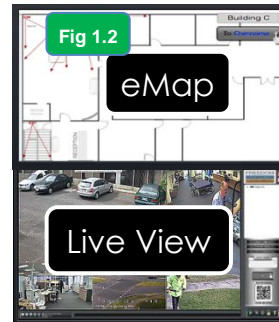
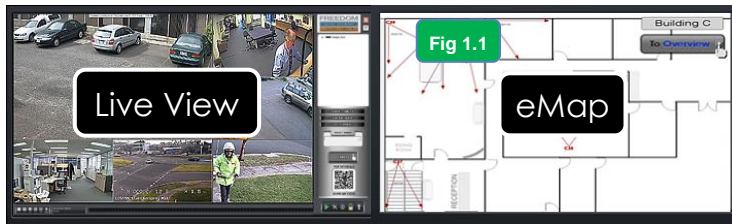



Setting up Dual monitors correctly

If the Freedom Server is going to include 'eMap' functionality there must be 2 monitors connected to the unit.

The 'eMap' monitor is usually on the right of the 'primary' (Live view) monitor. (Fig 1.1)

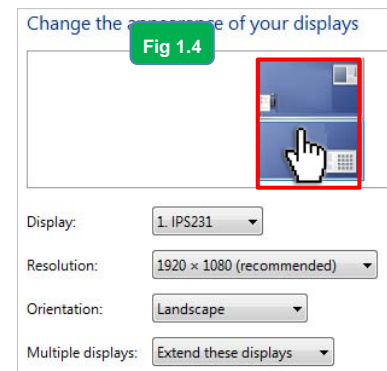
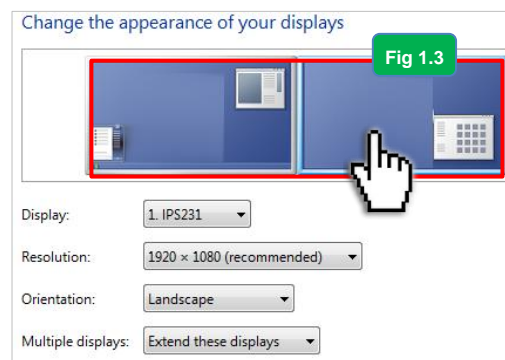
If space is an issue you may prefer to mount the monitors 1 below the other (Fig 1.2)




To make sure the mouse moves across to the next monitor correctly you may need modify the display properties in Windows. To open the display properties click the 'Start'  icon and type '**desk.cpl**' then press <ENTER>, this opens the 'screen resolution' window pictured below (Fig 1.3) (Fig 1.4).

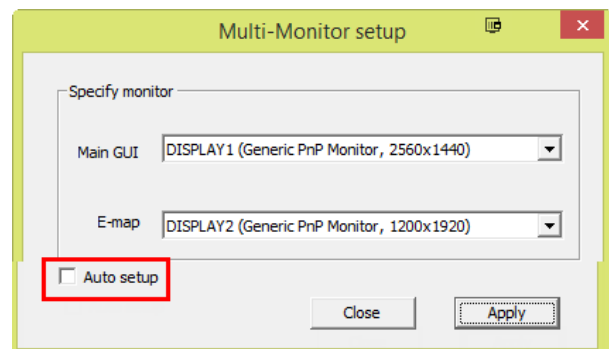
The current identity of each monitor can be obtained by clicking the '**Identify**' button.

If the screens are incorrectly positioned you can '**drag**' one of the monitors which is displayed as a blue rectangle to the position that reflects the correct position.



Choosing the default start-up monitors

When you have more than one monitor, the Freedom VMS software will open in your Windows™ 'default' monitor (1). If you would like the software to open another monitor click the '**Setup**'  icon located in the bottom right of the Liveview interface and near the bottom of the 'System Setup' windows that opens click the '**Multi-Monitor**' button, then un-tick the 'Auto setup' box and from the drop down menus select which monitors you wish to use for the Main GUI and the eMap screen. To finish click '**Apply**' then '**Close**'.



Freedom Server Operation



Starting The Freedom Server application

Double click the shortcut icon “Freedom Server” and a user login dialog will appear:




When you first install the application the default username will be ‘admin’ and password field is blank. Click the “Login” button, to start application. These settings can be modified under the ‘**User Management**’ section.

Unlocking Freedom software that is currently running

By default Freedom Server starts in a ‘locked’ state. You can find out if the program is currently in a ‘locked’ state by looking at the bottom right icons. The 2nd icon from the right indicates whether the software is locked or not, if the software is currently ‘**locked**’ the icon displayed will be **red**  if software is ‘**unlocked**’ the icon will be 

Locking Freedom prevents un-authorized use of the application. For the lock to work correctly a password must be setup for the current User.

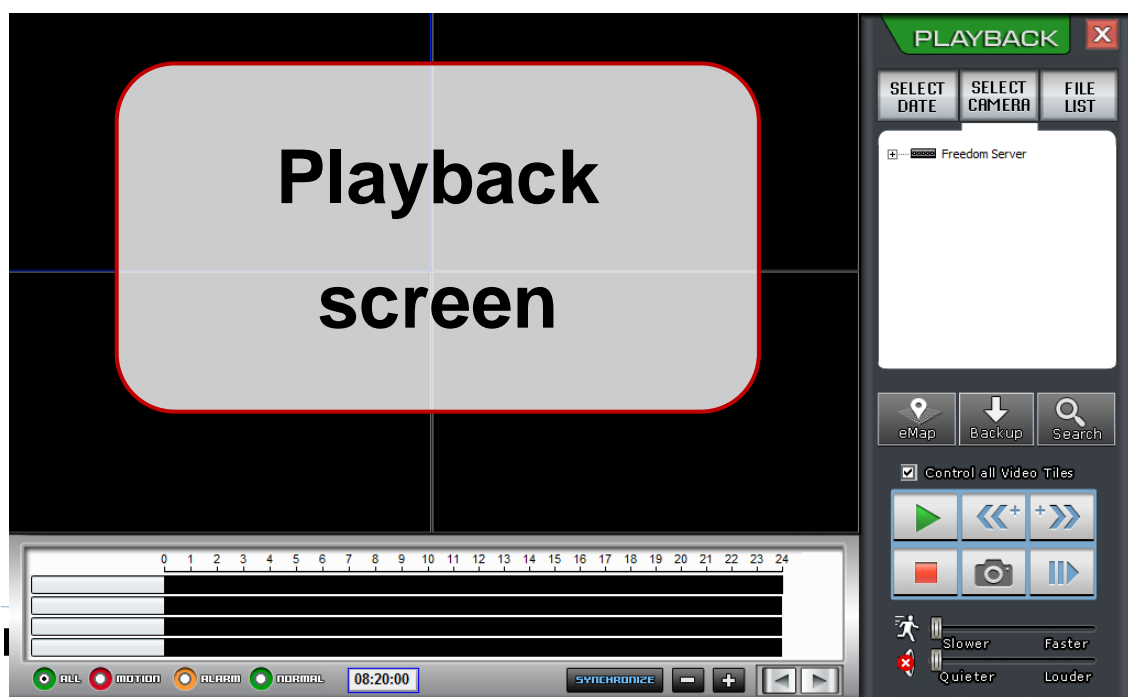
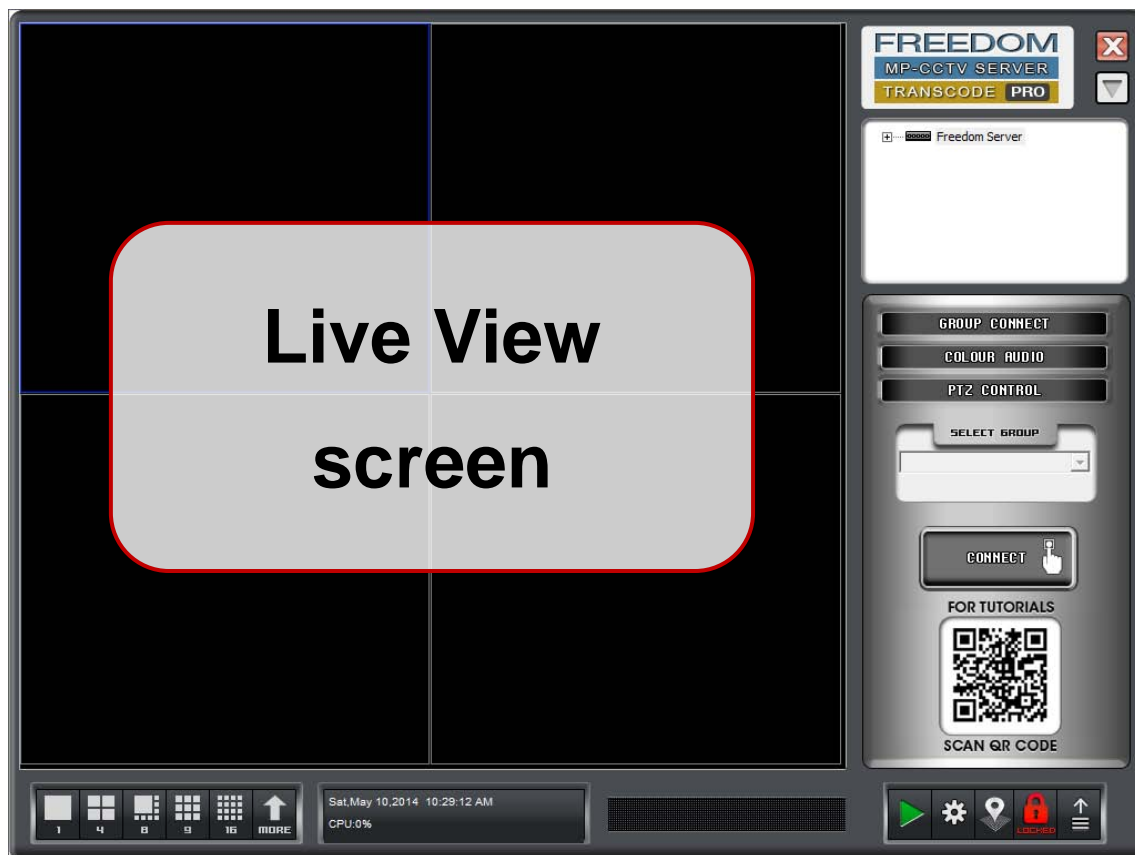
To lock Freedom, click on the lock icon,  you will then be prompted to enter your password to confirm request.

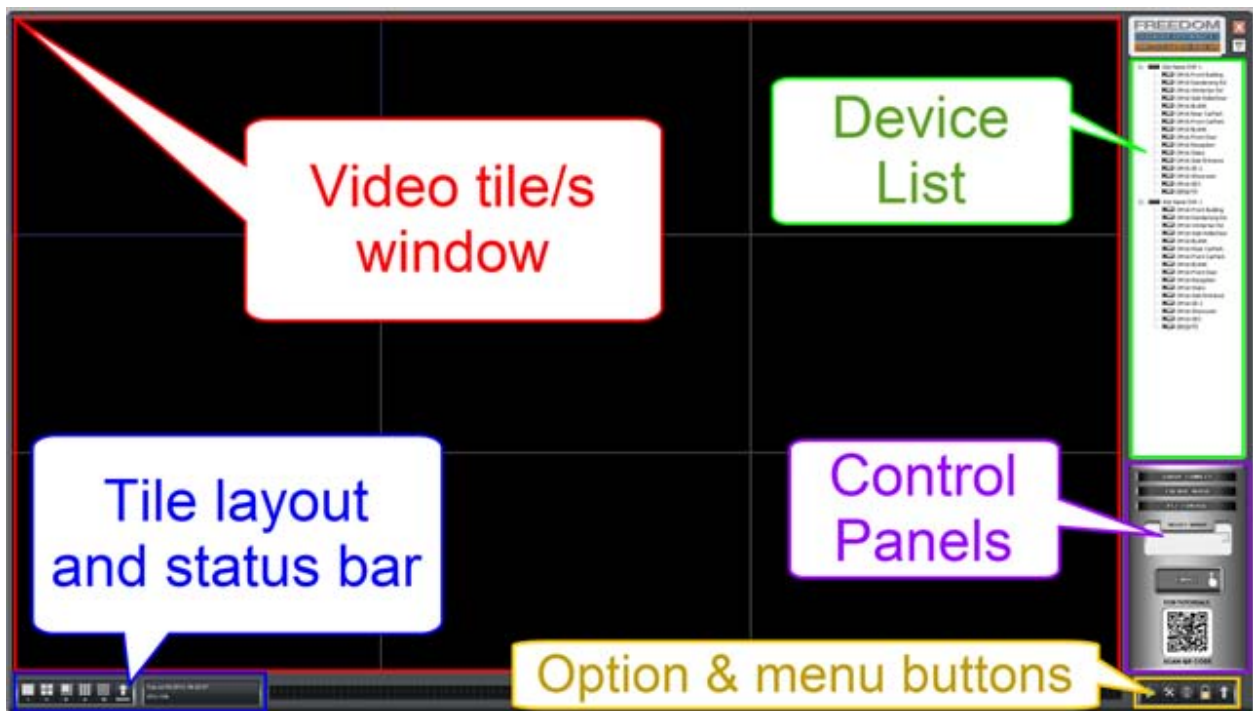
Getting to know the Freedom Server Interface.

The Freedom Server is divided into 2 major components which reflect the functionality of how most Users will interact with the software these components are:

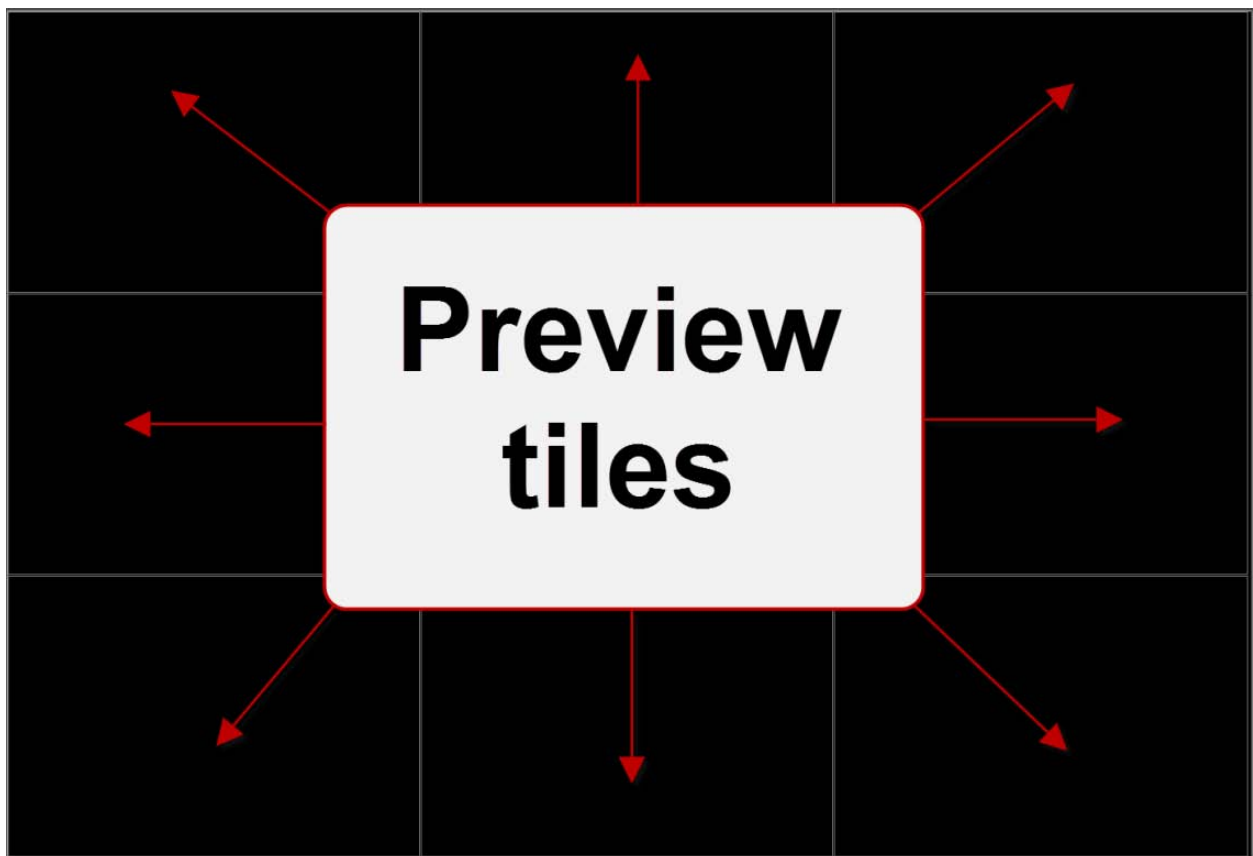
- **'Live View'** to view live video images.
- **'Playback'** to playback or backup pre-recorded video footage.

The two components can be seen in the images below








Below: Preview tiles:

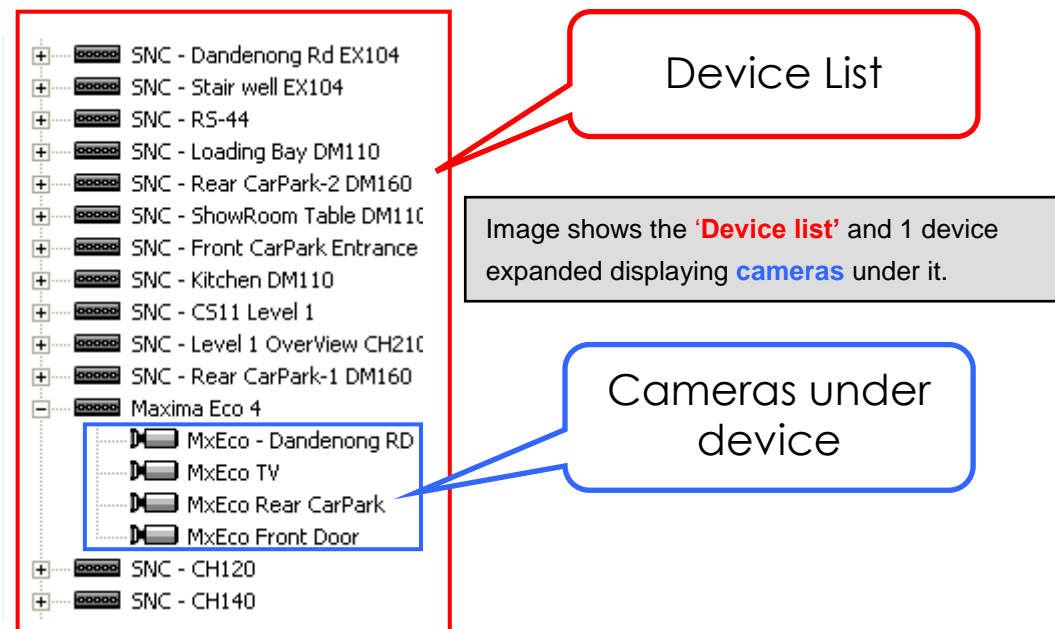


Device List window


The Device list displays a list of installed devices. A device is denoted by the this icon 

Each device has cameras listed under them. You can expand each device to see the cameras contained within them by clicking on the **plus** sign to the left of the device icon 

Cameras are signified by this  icon, when a camera is open (streaming) within a tile the icon changes to green 

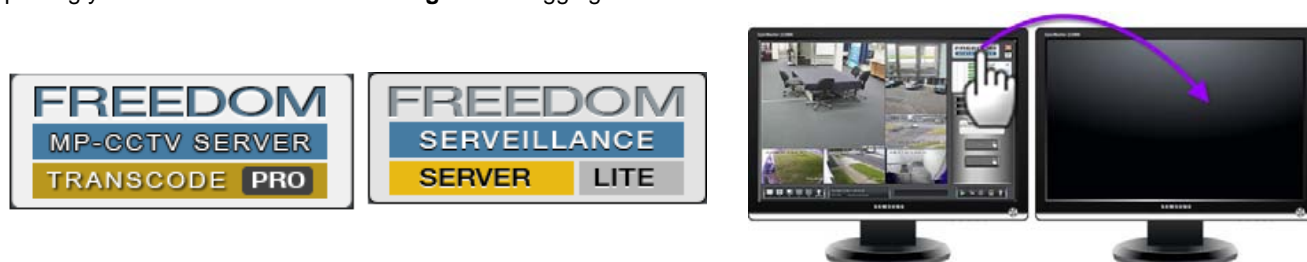


The following functions can be performed from the 'Device list' pane


- Display a single camera.
- Display all cameras attached to device.
- Close all open video from a particular device (by 'right clicking' over the  icon)
- Choose which stream to connect to (view- main stream or sub stream)
- Display list containing ONLY cameras → (No devices are displayed)
- Expand camera list → removes the control panel to show a longer list of camera.

Moving Live view to another monitor

If you have multiple monitors connected to your computer you can move the Live view screen to the secondary monitor by placing your cursor on the **Freedom Logo** and dragging it to another monitor.



Version and Licensing Information

To find out what version of Freedom you have and license add-on you have, while in the Live view section **'double click'** on the Freedom Surveillance logo or click on the 'Menu' Button  located at the bottom right of the Live view window and selected 'About /Learning' from the list.



Video Tile Layout

The preview window is made up of 'tiles'. Each tile can contain 'live' video footage. The type of layout and number of tiles is controlled by the 'tile layout' icons at the bottom left of Live View (Pictured right.)

There are 5 visible layout choices (1, 4, 8, 9 and 16) there are a further 6 layout options available when the 'More' button is clicked including a 'Full Screen' option.

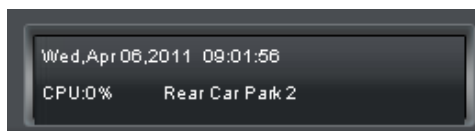
6 Windows
10 Windows
13 Windows
25 Windows
36 Windows
Full Screen

To exit full screen by 'right' clicking over video tile and select 'Exit full screen'.



Tip: Choosing '**Full Screen**' is a great option for viewing multi-tiled layouts on a small monitor

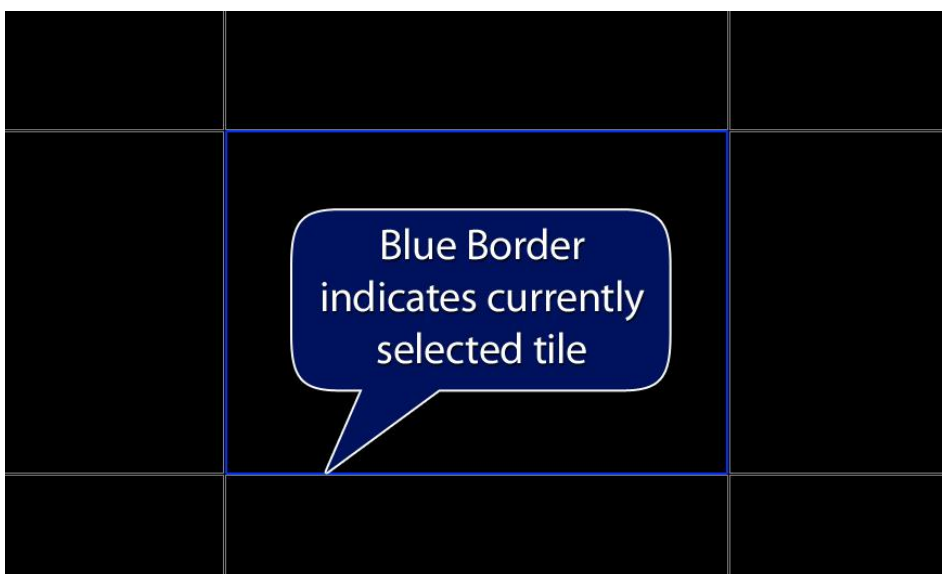
Status Bar



The status bar displays CPU usage, current date/time and the currently selected camera (blue border) as well as the name of the device the camera is connected to.

Currently selected tile


In Freedom VMS there is always a selected tile, this tile is indicated by a **blue** border around it. By default when you open the Freedom VMS the top left tile is the 'selected tile'. If you double click on a camera from the device list the video will open in the currently 'selected tile'. You can click on any tile within the tile layout window to make that tile the **selected tile**. Example pictured below shows the 'selected tile'.



Displaying live video in Freedom

There are a number of ways to insert 'live' video into a tile in Freedom.


METHOD 1: Dragging from the device list

1. Expand the device from which you wish to view a camera from and drag the camera icon  to a tile of your choice.




METHOD 2: Clicking a camera from the device list

1. Click on the video tile you wish the video to appear in.
2. Expand the device you wish to select cameras from.
3. Double click on the camera you wish to select, the video will appear in the tile you selected in Step 1.)

Tip: You can drag 'all' cameras on single device in 1 operation by dragging the Device icon  instead of the camera icon

METHOD 3: Dragging an eMap icon from an eMap

1. Click the e-Map icon  to bring up e-Map **Note: a 2nd monitor & an eMap is required to use this feature.**
2. Drag the **RED CX** number or **blue** camera icon to the video tile you wish the video to appear in.



METHOD 4: Clicking the 'CONNECT' button (Live view only)

Note: To use this method a Group has to have been configured prior (refer 'Group Setup chapter')

1. From Live view with 'Group Connect' panel displaying click on the 'CONNECT' button.
This will connect to the currently selected group, if you wish to select another pre-defined group click the arrow on the drop down menu and select from list.
2. To disconnect from a group click on 'DIS-CONNECT' button".



METHOD 5: Right clicking over camera or device icon in device list.

1. In the Device list, expand the device you wish to select cameras from.
2. Select (highlight) the tile you wish the camera to appear in.

'Right' click over the camera  you wish to view and choose either 'Main stream' or 'Sub stream'.

Note: you can select to view an **entire DVR** by 'Right' clicking over device icon  and choosing either "Preview.

Live video 'right click' context menu options

When you 'right click' over a tile that has live video you have a number of options these include:

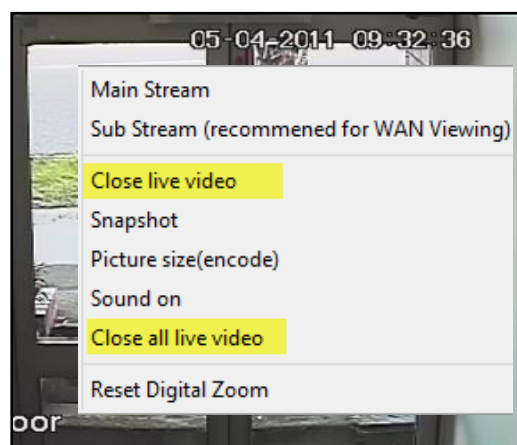
Main Stream	Selects main stream to view, which is usually the higher quality / resolution stream
Sub Stream	Select sub or extra stream to view which is the recommended stream for off-site viewing
Close live video	Closes the current live video within the tile you right clicked on
Snapshot	Takes a picture of the current frame in the currently select tile
Picture size	Displays the encoding resolution of the video running in the tile you right clicked on
Sound on	Turns audio on for the selected tile (only works if camera has audio configured)
Close all live video	Closes All video tiles with live streams running
Reset Digital Zoom	Return video in the selected tile to an un-zoomed state

Closing live video in Freedom

To close live video '**Right Click**' over the desired tile that has live video displaying.

You then have an option to either select '**close live video**' to close a single tile or '**close all live video**'.

'Double clicking' on an open camera in the device list also closes the live video.



Using Digital Zoom

To use digital zoom, draw a box around the area you wish to zoom in on.

Starting from the top left of the area you wish to zoom in on drag diagonally down with the mouse or finger if on a touch device.

You can also zoom in by using the 'wheel' on your mouse, making sure you select the correct video tile first.



Zoom navigation and status

When a video image is in a 'zoomed state' the **zoom navigator** appears at the bottom right of the video tile (Picture below.) The outer white border represents a scaled size of the original video size and the inner green dashed box represents how far the image is zoomed in relation to the original (true) video size. Dragging the inner green box allows you to move around within the zoomed video.

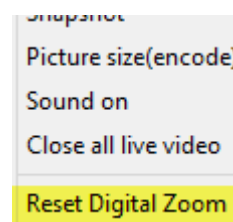


Note: When taking a snapshot in a zoom state the zoomed portion of the image is what is captured.

Return video to original size

To return the video to its original size 'right click' over the zoom video and select '**Reset Digital Zoom**' to restore just this video tile to its original size





You can also use your mouse wheel to exit zoom by rolling the wheel until you no longer see the zoom navigator in the bottom right of the video tile.

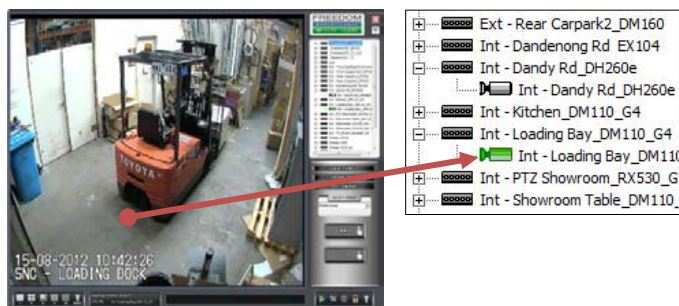


Status icons.

The device list on the right side of the window contains a list of devices and cameras under those devices.

The meaning of each icon is listed below.

	Indicates a device entity
	Camera is currently not being streamed
	Camera is open / streaming
	Camera is being recorded



Live View performance, limitations and quality

Whenever you view footage from a DVR or NVR there are a number of factors that determine the quality and reliability of the video and the quantity of video tiles you can view concurrently. These factors include:

- CPU power of DVR or IP encoder
- Resolution, Bitrate and Frame-Rate set on DVR/NVR or IP encoder
- Additional features turned on in the recorder or IP encoder, i.e. Motion detection
- How many Users are currently connected to a DVR/NVR or IP encoder
- How fast the CPU is in 'your' PC (at decoding live video)
- How fast and consistent your network connection is
- How much latency exists in your network (smaller the better)

Remote **Live** viewing over Internet (WAN) and Stream Usage

When viewing camera/s off-site the '**UPLOAD**' speed **from the remote site** becomes critical and determines the quality of video that can be viewed reliably and the number of cameras that can be viewed concurrently.

Most recorders and IP cameras have multiple video streams. The usage of these stream can vary, but the majority of the time one stream will be a **RECORDING STREAM** often referred to as '**main-stream**', while the second stream is often referred to as the '**Sub-stream**' which is often used for 'low bandwidth', remote monitoring off-site or from mobile devices .

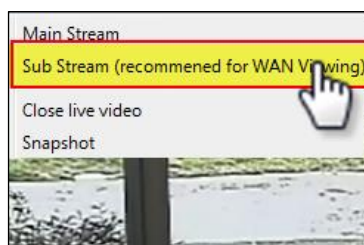
Note: Quality of the 'sub stream' is not as good as that of the 'main stream' but is more reliable for remote viewing.

Main-Stream usage:

- Recording footage
- Local site/LAN viewing

Sub-Stream usage:

- Remote off-site Viewing (internet)
- 3G/4G Mobile Viewing



You can connect to a different stream by either 'Right-clicking' over the video tile or camera icon in the 'device list' and selecting '**Sub Stream**' or '**Main Stream**' from the pop-up menu.

Control Panels

Note: Some of the items in the control panels may be inaccessible to users with restricted user permissions.

There are 3 Control Panels within Freedom Server.
You can navigate between them by clicking on one of the three top level buttons shown on the right

GROUP CONNECT

COLOUR AUDIO

PTZ CONTROL

Group Connect Panel

GROUP CONNECT

COLOUR AUDIO

PTZ CONTROL

SELECT GROUP

CONNECT

FOR TUTORIALS

SCAN QR CODE

Colour Audio Panel

GROUP CONNECT

COLOUR AUDIO

PTZ CONTROL

COPY TO

DEFAULT

Hue

Contrast

Saturation

Brightness

Sound

PTZ Panel

GROUP CONNECT

COLOUR AUDIO

PTZ CONTROL

SET

PRESET

GO

LIGHTS

PTZ SPEED

WIPER

AUTO PAN ON

FOCUS

IRIS

ZOOM

Group Connect Panel

The Group Connect Panel allows you to connect to a group of pre-defined cameras.

Camera groups allow you to quickly open a group of related cameras instead of having to manually place each individual camera into a video tile. For example you may have a group called **'entrances'** that opens cameras looking at entrances, or you may have a group called **'POS'** that brings up all cameras overlooking Point of Sale areas.

Below the group connect button is a QR code that can be used to quickly navigate to the Freedom VMS tutorial web page using a smartphone or tablet.

Using Group Connect

1

Select group from dropdown list

2

Click **Connect** to open the selected group in live view

GROUP CONNECT

COLOUR AUDIO

PTZ CONTROL

SELECT GROUP

Entrances

CONNECT

FOR TUTORIALS

SCAN QR CODE

DIS-CONNECT

Note: You must disconnect from a group before you can return to normal 'Live View' operation. To disconnect from a group, click the dis-connect button

Colour / Audio Control Panel

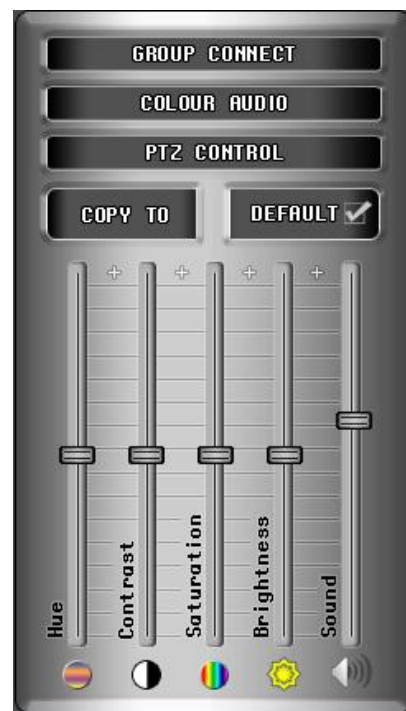
The Colour / Audio panel allows you to control how the video image looks on your display and the sound volume of the video channels that have audio active.

There are 2 additional buttons within the Colour/Audio Panel,
These are


'Copy-To' and **'Default'**

Copy-top allows you to copy your existing preferences to other cameras.

Default – button resets all parameters to their original (default) positions



Using Colour / Audio Control Panel

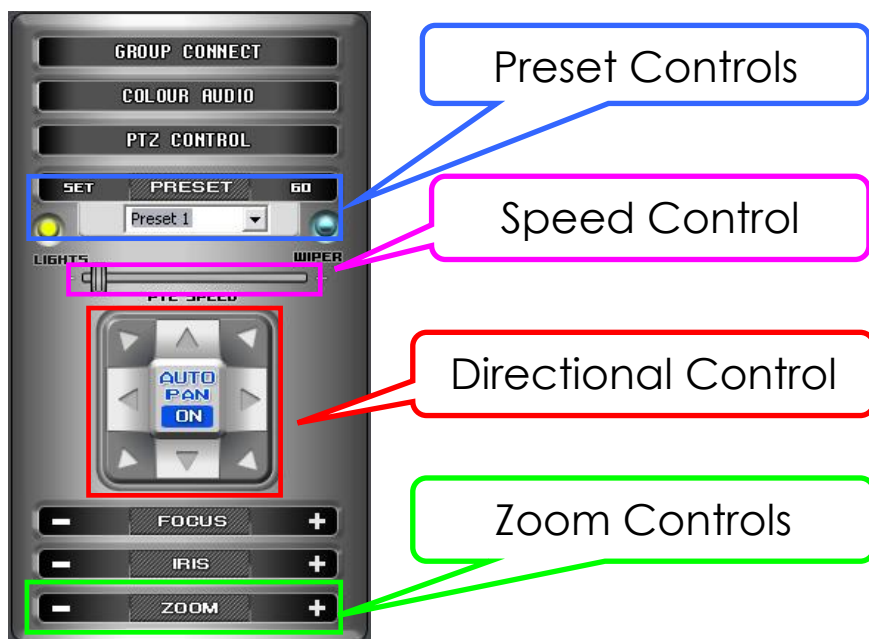
First **select** the video tile of the camera you want to make the changes to (**Blue Border**) then **drag** the **slider button/s**  to the desired position/s. Clicking the 'Default' button will cause the selected camera to revert back to its defaults.

CAUTION : Modifying these settings will change the appearance of the recorded footage.

DO NOT use these settings to compensate for a faulty or hard to see monitor.

PTZ Control Panel


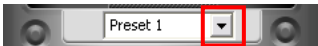

Note: This panel only works on cameras that have **PTZ** (Pan Tilt Zoom) capabilities (Movable), and have been configured, and if the user has permissions.



The PTZ panel is divided into four sections, Preset control, Speed control, Directional control and Zoom in/out control

Defining a Preset


To define a 'PTZ' preset follow these steps:

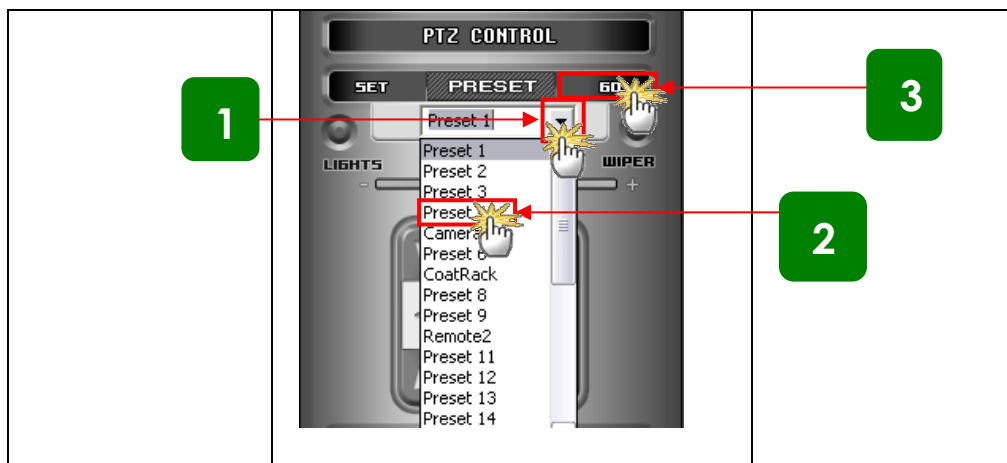
1. Make sure the PTZ camera is currently being displayed in the video tile before proceeding.
2. Select (click) the tile containing the PTZ camera.
3. Click '**PTZ Control**' button  to enter PTZ mode.
4. Use the PTZ controls to position the camera to the desire position.
5. Click the Preset dropdown button .
6. From the list select an unused preset or in the preset description input box type the name you wish to give the preset.
7. Click the '**SET**' button to save you preset. .

Calling a preset

Make sure the 'PTZ' camera is currently being displayed in video tile before proceeding.

Select (click) the tile containing the PTZ camera.

1. Click 'PTZ Control' button  to enter PTZ mode.
2. Click the dropdown menu button. (1).
3. Select the **preset** you wish to go to (2).
4. Click the 'GO' button (3) call the preset.



PTZ SPEED CONTROL

The PTZ speed bar, controls the speed at which the selected PTZ camera Pans, Tilts and Zooms when a button is pressed or held down.



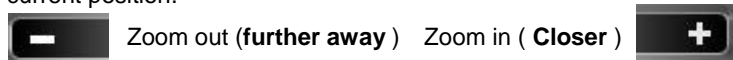
PTZ DIRECTIONAL CONTROL

The directional control button is intuitive; the direction of the arrow indicates the direction the PTZ camera will move once a button is pressed. The longer you hold the button down the more the camera will move in that direction.



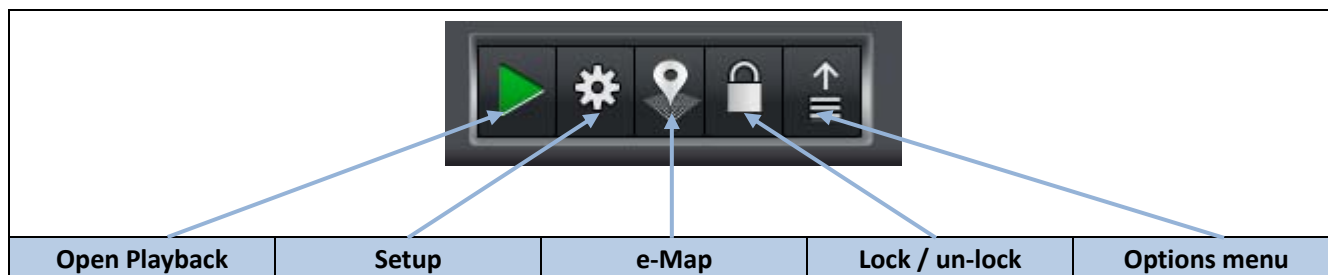
PTZ ZOOM CONTROL

The PTZ Zoom control allows you to zoom in or out from your current position.



Options buttons - Overview

The option buttons are located at the bottom right of the Freedom Server application.



The first icon is the **Playback** icon, clicking this icon will close all live video and open Freedom Playback section which allows you to playback pre-recorded video or images.



Clicking this icon takes you to the '**SETUP**' window which is where you can →

- Change the default path (*location on local Hard drive*), or network for downloading video & pictures.
- Add/remove and configure hardware devices (DVR's IP cameras etc...)
- Create, remove or edit a logical group of cameras (i.e. all POS cameras)
- Create, remove or edit user permissions and rights (what they can do or view)



Clicking on this icon opens an e-Map (electronic map) on a second monitor, (**2 monitors required.**)



Clicking on this icon will **lock** the Freedom VMS software from any changes, this will prevent any accidental clicks or un-authorized modifications. You will be prompted for a password to un-lock the software. When the software is '**locked**' the icon changes to →




Clicking this icon brings up a number of menus that have the following functions:

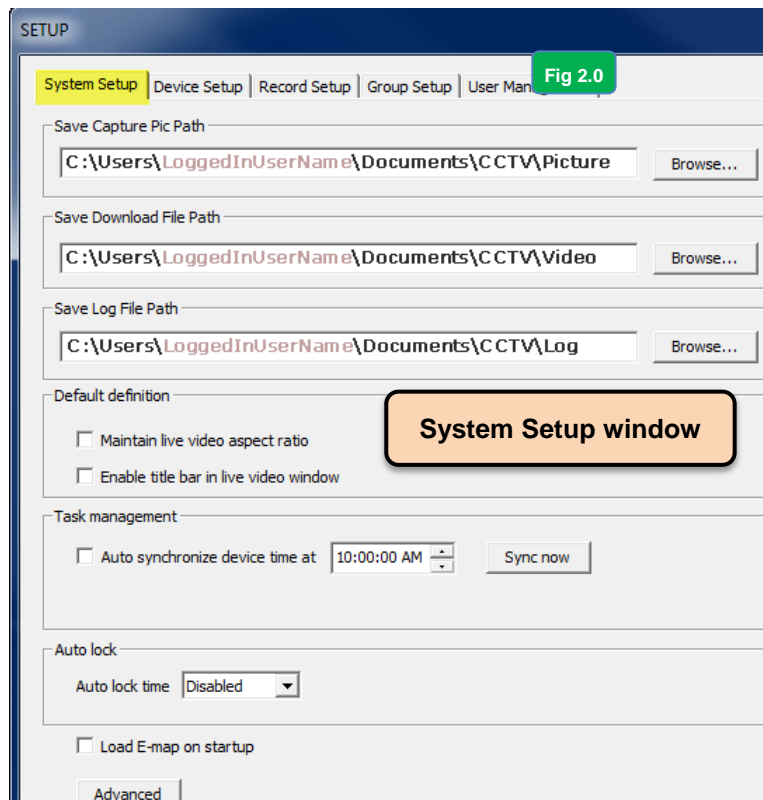
- **File manager** → Used to delete previously downloaded footage & pictures
- **Device status** → Check the status of a device i.e. is it recording?
- **Log** → Used to audit history of actions, events from the Freedom software and devices in the device list.
- **Talk** → Opens the bi-directional audio window on supported / configured devices (like intercom)
- **E-Map setup** → Open eMap setup windows for the creation, editing, importing & exporting of eMaps.
- **Freedom HDD Viewer** → Plays footage from a hard disk removed from a Freedom DVR/NVR/HVR.
- **Maxima HDD Viewer** → Plays footage from a hard disk removed from a Maxima DVR.
- **Backup system parameters** → Save the configuration of the Freedom software to a selected location.
- **Import system parameters** → Allows you to import a previously saved 'Freedom Server' configuration to current Freedom software.
- **About / Learning** → Displays version of Freedom software installed, licensing information & tutorials URL
- **Re-Start Transcode Server** → Restart transcode server
- **Re-Start Freedom** → Restart the software.

System Setup

Note: You must have 'setup' rights to modify or enter the follow items.

The System setup window (**Fig 2.0**) allows you to change common defaults for folder locations, video appearance and behaviour on start-ups.

To navigate to the 'System Setup' menu click on the setup icon  which opens the System Setup window (**Fig 2.0**)



Default download locations

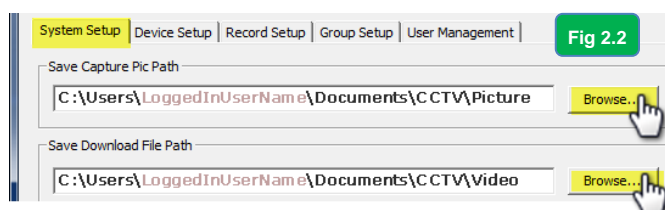
For Windows 7™ and Windows 8™ the default download folder locations are displayed below.

Saved picture path = C:\Users\UserNameYouLoggedInAs\Documents\CCTV\Pictures

Saved download path = C:\Users\UserNameYouLoggedInAs\Documents\CCTV\Video

Saved log files path = C:\Users\UserNameYouLoggedInAs\Documents\CCTV\Log

If you would like to change the default folder locations click on the setup button, then click on the '**Browse**' button (**Fig 2.2**) next to 'Save Capture Pic Path' and navigate to the folder you wish to use then click '**OK**' button. Repeat this step for the 'Downloads' and 'Log' folders'.



Maintain original video aspect ratio

Allows you to choose whether to maintain original aspect ratio, or stretch video to take up the entire video tile which may make the video appear out of proportion, but does give you a larger image. (default = don't maintain)

Enable title bar in live video window



Inserts a horizontal bar at the top of each video tile allowing you to easily take snapshot, mute sound or close tile.

This bar allows you to 'single-click' to close, take a snapshot or mute/enable sound. The downside to this option is the vertical screen real estate you lose when this feature is on.

Task management

Allows automatic time synchronization of **all** devices currently listed the '**device list**' to this PC's time at a specific time.

Note: The Freedom Software must be running at time you set for synchronization to occur.

CAUTION : Generally with time synchronization **only one** device should be configured to 'sync' a particular device.

Defaults → Time sync turned off and set to 10.00am.

Auto lock

Allows you to setup the auto lock time. (Default = Disabled)

Auto lock time options include: 3, 6, 9, 12, or 15 minutes.

When the software is in a 'locked' state the icon displayed in the lower right option button will be red (pictured right).



Load E-map on startup

Allows eMaps to automatically load upon starting Freedom. Only select (tick) if you have an eMap configured and a second monitor attached. Default = unticked.

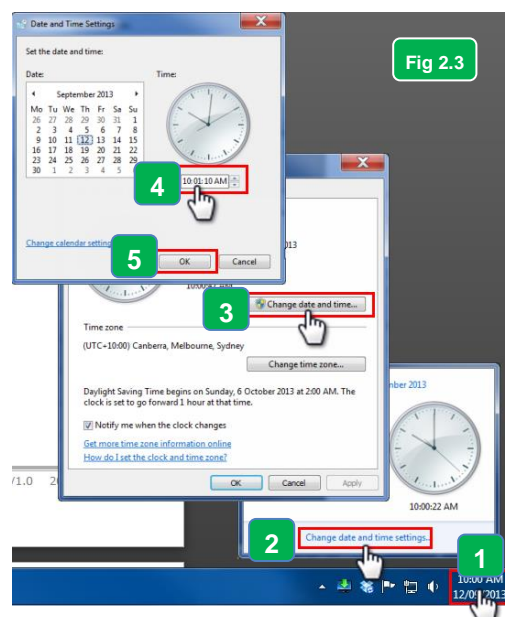
Multi-Monitor

Allows you to choose what monitor the Freedom main GUI and eMaps appear on. (See 'Installation' section for more detail)

Changing PC clock time (Admin rights required)

To change the time on Freedom Server, exit to Windows, click on the time displayed at the bottom right of the taskbar and click on 'Change date and time settings' then click on 'Change date and time' button, change the date/time then click 'OK'.

Fig 2.3 shows the sequence of steps to change the time on a Windows 7, 8 PC



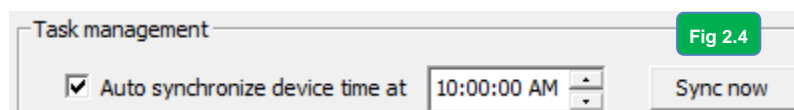
Time Synchronizing

In any CCTV system time synchronization is an important function. All network addressable devices should be time synced. This includes Recorders, CCTV Client PCs, IP cameras and encoders.

There are various methods and applications for maintaining time synchronization between devices. One of the most common is the NTP (Network Time Protocol.) Most network addressable devices support the NTP protocol. For NTP to work there must be an NTP server present and available to devices on your CCTV network. You need to liaise with the sites I.T. Administrator to attain this information.

If no NTP server is available, time synchronization can be performed from within the Freedom VMS software.

Navigate to 'Setup' → **System setup**, then under the **Task management** section, tick the 'Auto Synchronize device time at' box (**Fig 2.4.**) You then specify when you want time synchronization to occur. This will time sync all devices installed on 'this' Freedom software to this PC's time.



Below are some recommendations for time synchronization in a Freedom VMS environment.

You must ensure that all IP addressable devices have the correct GMT time zone offset and if DST is applicable to your location DST should be enabled (ticked) and configured on all devices via the devices 'web service' page.

DEFINITIONS

Master Time Controller (MTC): A Freedom Server or Freedom Client that acts as the timer keeper for the entire CCTV system.

Master Server: A Freedom Server that has 'other' recording devices added to it in order to access all cameras from a single 'Master' Freedom Server.

Freedom Slave: A Freedom Server that is being time synched via a 'MTC'

Embedded Slave: An embedded DVR/NVR (Maxima/Omega) that is accessed via an MTC or Master Server.

Rules

- There should only be ONE Server or Client acting as an MTC.
- Any IP cameras or encoders that are recorded on a Freedom Server are to be time synced by that server & that Server only.
- In scenarios where a 'Master Server' is present, the 'Master Server' is to time sync all other recorders it has in its device list which may be other 'slave Freedom Servers' as well as any IP cameras or encoders it's recording.
- If there is more than one Freedom Server recording IP cameras or encoders in a 'Master Server' environment, each 'slave' Freedom Server must be set to synchronize at a DIFFERENT TIME, so that each 'slave' Freedom Server that is recording IP cameras or cameras from encoders must have their time sync setup to occur 10 minutes after the MTC sync (+10)
- In scenarios where there is no 'Master Server' present, i.e. all embedded recorders Slave Freedom server, a single Freedom Client can be setup to time sync all recorders at a time of the day when the Client PC is most likely to be on and the Freedom Client software open.

Advanced System Setup

Opens the Advanced setup window (pictured below) which allows you to set defaults for:

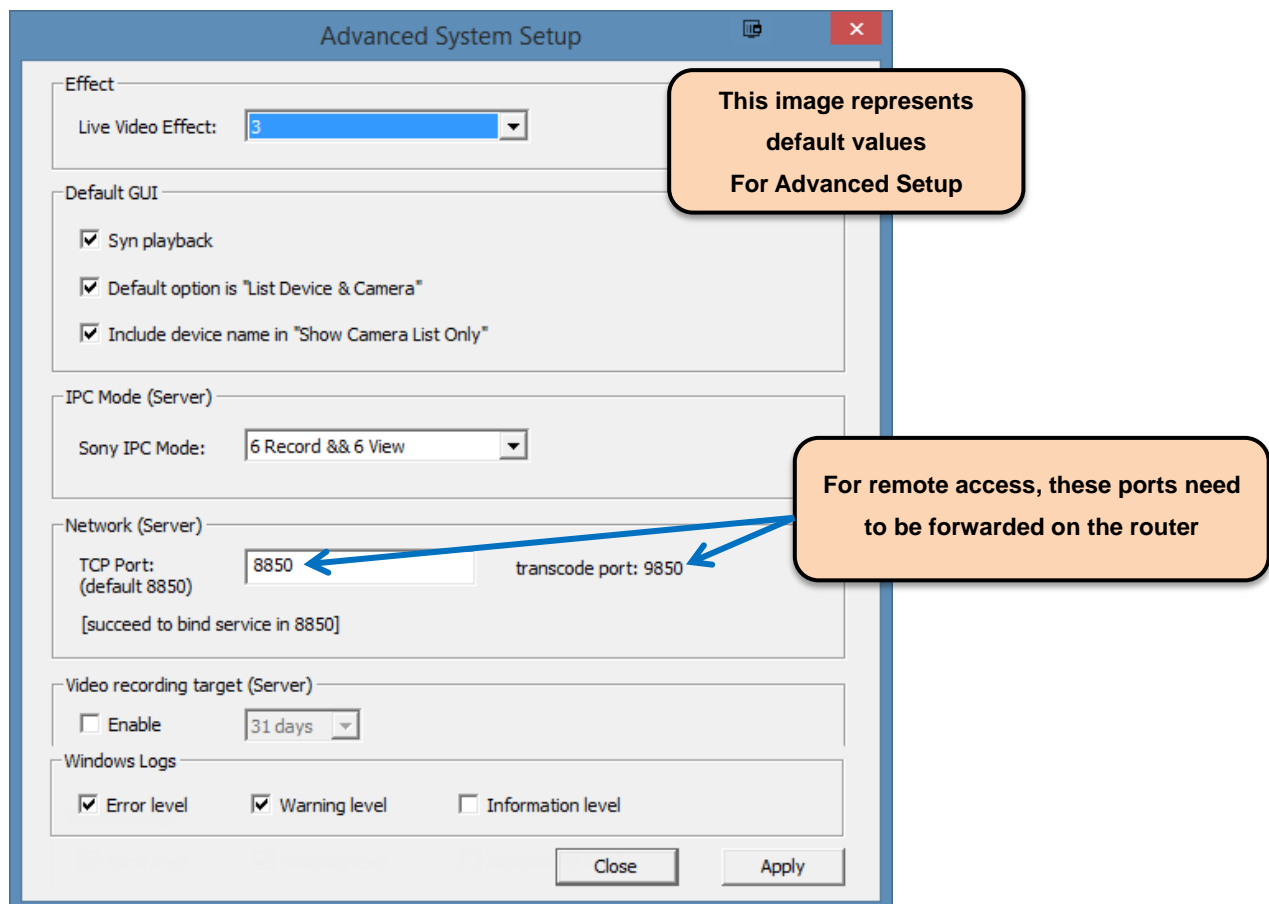
- **Live Video Effect:** Should be left at default unless directed to change by your CCTV technician.
- Whether or not to have cameras synchronized automatically during playback.
- Whether device list should display both “**Device names & cameras**” or a list of **cameras only**.
- Whether to include the ‘**Device name**’ when ‘Show Camera List only’ is selected. (default is on)
- **IPC mode** contains a list options on how Sony IP cameras will be viewed or recorded.
- **Listen Port:** The port that Freedom Server will use for client connections to itself.
- **Video recording target:** Enables you to be notified when the recording duration of the devices being recorded on the Server is low.
- **Windows Logs** allow you to choose what type of Windows event logs Freedom will record in its log file. Default is ‘Error’ & ‘Warning’ level.

Caution: When setting ‘Listen port’ don’t use any of the following numbers; **1 – 1023, 1900, 3800, 5000, 5050, 9999, 39999**

Port Forwarding:

If you need to access the Freedom Server remotely and/or on a mobile device you must port forward the TCP port and transcode port that is listed in the Network (Server) section in the ‘Advanced System Setup’ section below and also ensure the ‘Transcode’ file is given firewall access.

If you have multiple Freedom Servers at a single site and require remote WAN access each ‘TCP port’ value must be unique. You don’t need to modify the transcode port; this value is incremented automatically based on the main TCP port.



Device Setup

Note: You must have appropriate setup rights to modify settings in the 'Setup' menu.

The device setup window is where you add, remove and edit devices. You can also configure the encoding parameters for each camera under each device.

Each camera can be configured to start streaming as soon as the Freedom software starts or re-starts. You can also hide a camera from being displayed in the device list, which can be useful if you do not wish users to see a convert camera in the camera list tree.

Adding a device



www.freedomvms.com/tutorials/newdevice



There are 2 methods of adding a device to Freedom VMS™, one is to automatically search using a method called 'auto discovery' which tries to detect compatible hardware on your network and populate a list of devices.

This method can often be 'blocked' from working by firewalls and does NOT work over the internet, which is why we usually recommend the manual method of adding the device.

WARNING: While adding a device, if you input the incorrect username or password more than 3 times you may be locked out of that device for approximately ~30 minutes.

Device field and meaning


- Device Name** → Free text field representing the name you wish to give the device
- Device Type** → A list that signifies the type or protocol of the device
- Public IP** → The Public/WAN IP address of device (**Only applicable if you have a Public IP address**)
- Domain Name** → DNS name of device (**Only applicable if you have an addressable DNS service**)
- Public TCP Port** → The public TCP port of device (Only needed if you have a Public IP address or DNS name)
- Public Timeout** → Time in seconds before Freedom stops trying to connect using the public IP address
- Private IP** → Private IP address the device is using, this is the LAN address which the device is configured to.
- Private TCP Port** → The TCP port assigned to device locally with the LAN and configured on the device itself
- Private Timeout** → Time in seconds before Freedom stops trying to connect using the private IP address
- User Name** → Username that is setup on the device and is used to access the device.
- Password** → The password that is configured on the device and corresponding to the username field
- Default Live Video** → Sets the default stream Freedom uses when it connects to the device
- Auto** → Calls main-stream video of the device if private IP address is detected or sub-stream video of the device if public IP address is detected.
 - Sub stream** → Forces default video to use the devices sub-stream.
 - Main stream** → Forces default video to use the devices mainstream video.
- Advanced (button):** Allows you to set the HTTP port of the device.

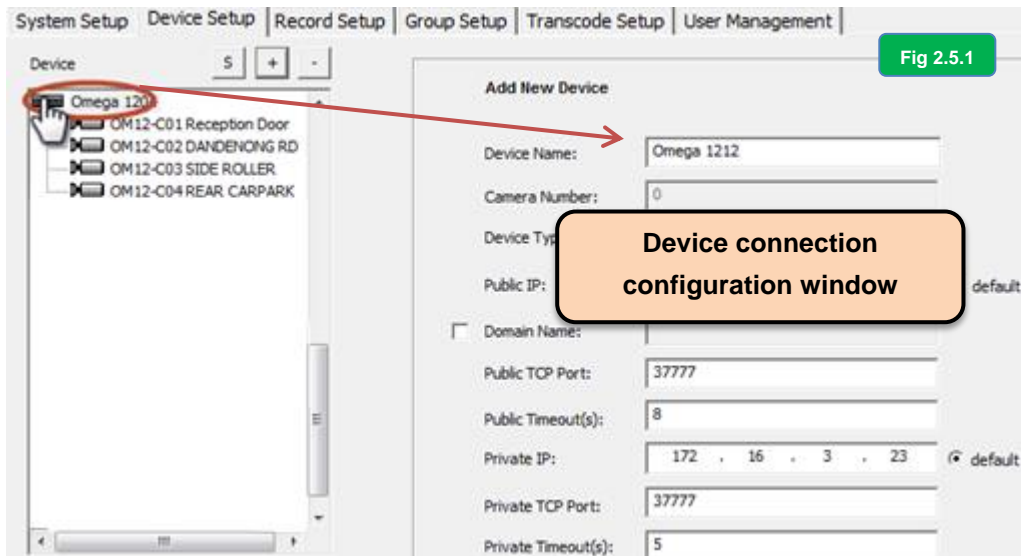
The device list can be sorted alphabetically by **ticking** the '**Sorted in alphabetical order**' box.

Understanding the 'Device Setup' window

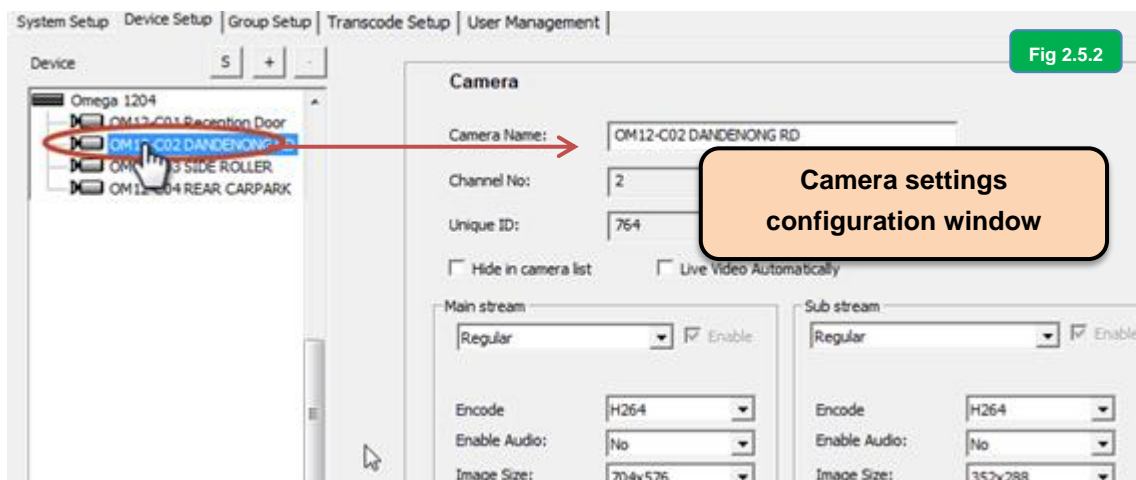
In Freedom, device configuration is broken down into two major components.

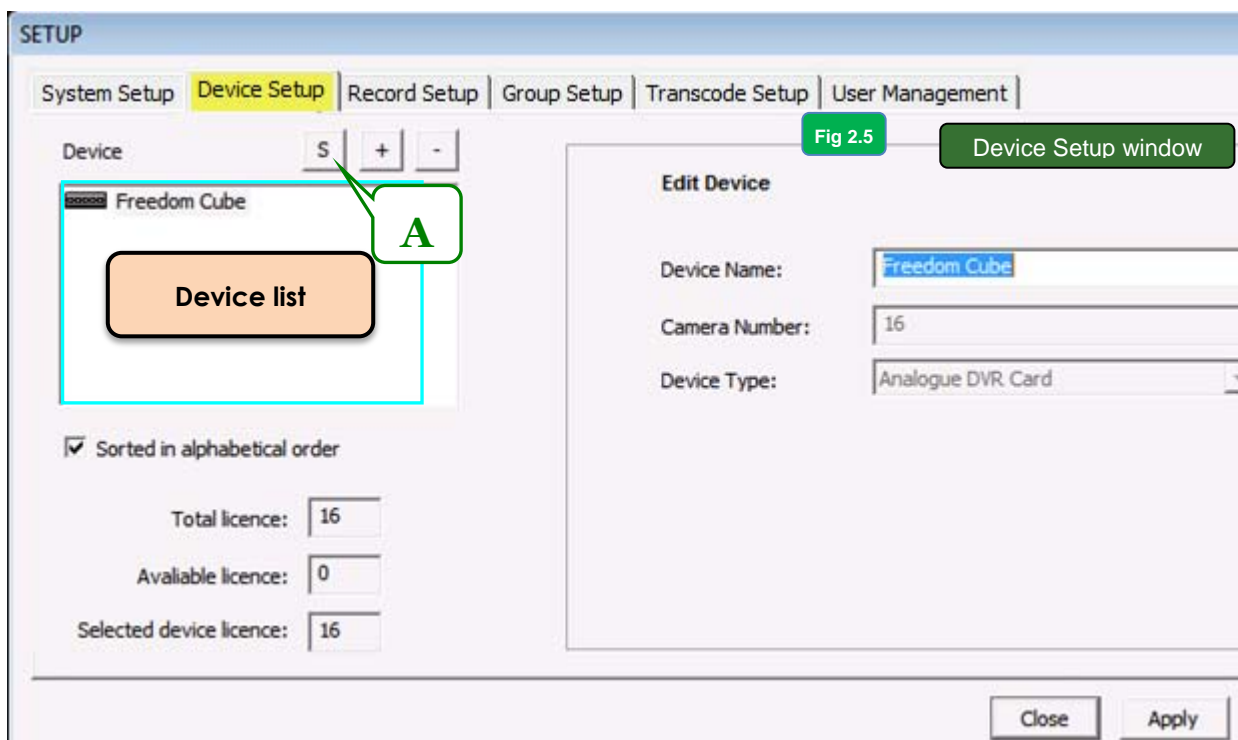
1. **Device** specific connection settings and name. (Fig 2.5.1)
2. **Camera/ channel** specific settings. (Fig 2.5.2)

To open a devices connection information window, click on the name of the device  Omega 1204




To open **camera/channel specific settings**, click on the name of camera you wish to open, if you do not see any cameras listed under the device you may need to click on the 'Device name' in order to expose cameras under a particular device.

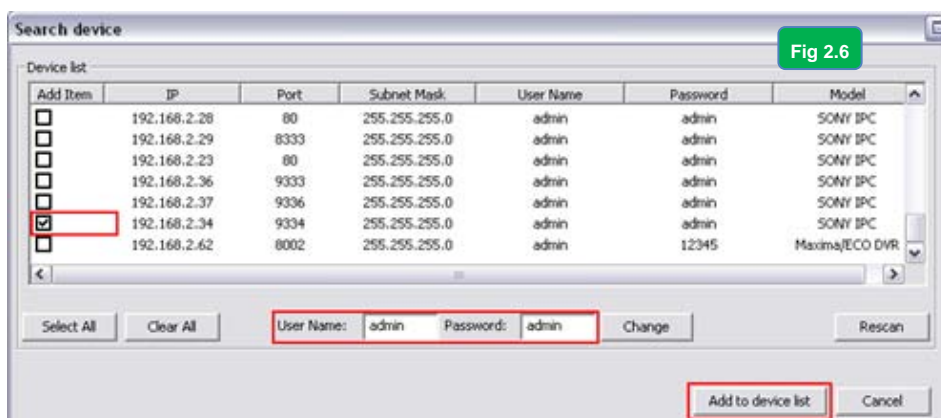




Note: For the automatic discovery feature to work correctly, firewalls must allow access to the Freedom Server Network discovery tool called “**FreedomDiscovery.exe**”, usually located in the C:\Program Files (x86)\Freedom\Freedom Server V3.3\ folder and the device must be on the same local area network (LAN) as your computer.

Adding a device using network discovery method

Click the  (search) icon (**Fig 2.5A**) within the ‘**Device Setup**’ tab to initiate a search, you will then be presented with a list of devices found as seen in **Fig 2.6**. Now tick ☒ the device you wish to add from the list then input the correct **username** and **password** for the device you are adding. Click ‘**Add to device list**’ button to finalize the device addition.




Adding a device manually

Adding a device manually requires that you have prior knowledge of 5 parameters relating to the device you are adding.

These being →

1. The type of device i.e. Omega DVR IPC, Sony IPC, Maxima DVR, ONVIF, Freedom Server etc.
2. Device local IP address (also Public IP address if applicable)
3. Device TCP port.
4. Device username. (Must be alpha numeric with the exception of hyphen '-' and underscore '_')
5. Device Password.

To add a device manually to the Freedom Server device list click the  "Add device" button (Fig 2.4 Part A) button. Populate the fields with the appropriate values. Finally click 'Apply' button, then 'OK' then the 'Close' button.



!Important: Do not use '/' or '\' symbols in a device or camera name

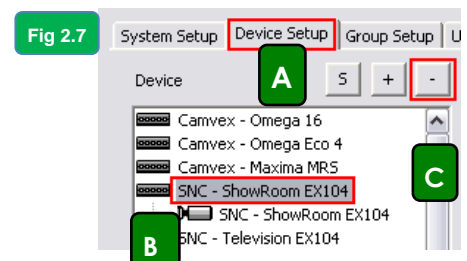
If device was added successfully you get a popup window stating 'Completed'. If you get a 'Fail' of any sort it could mean any of the following.

- IP address, TCP Port, username, Password is different to that set in the device.
- The device is not connected to your network.
- If connecting **off-site (WAN)** you could 'Ping' your public IP address to test availability.
- If off-site 'Ping' test was successful the device TCP port may not be port-forwarded correctly.

Removing a device from Freedom

To remove a device from Freedom Server follow these steps →

1. Enter the setup section by clicking on the setup icon. 
2. Click the 'Device Setup' tab. (Fig 2.7 A)
3. Highlight the device you wish to remove (Fig 2.7 B)
4. Click the 'Remove Device' icon  (Fig 2.7 C)
5. Confirm device removal then click 'Close'.

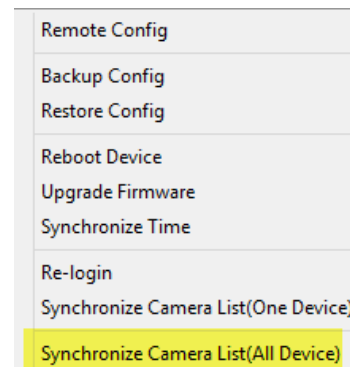


Important! When deleting an IP camera or encoder you will be asked whether you want to delete the footage associated with the device. It's recommended you tick 'delete footage' box, if you do not do so the footage files will remain on the hard disk drives indefinitely which will reduce your overall retention period.

Device 'right click' context menu options:

Right clicking over a device in the device list gives you the following options.

- **Remote Config** → opens the devices web configuration page, which allows you to configure settings on the remote device.
- **Backup Config** → backs-up a devices configuration.
- **Restore Config** → Restores a devices configuration.
- **Reboot Device** → Restarts the device.
- **Upgrade Firmware** → Allows you to perform a firmware update.
- **Synchronize Time** → Pushes current time to device.
- **Re-login** → performs a re-login to remote device or Server
- **Synchronize Camera List (One Device)** → Performs a sync to the device you 'right clicked' on.
- **Synchronize Camera List (All Device)** → Performs a sync to all devices.



IMPORTANT ! Whenever a device in the 'device list' has been modified, for example cameras have been **added, renamed or re-ordered**, you must **Re-Synchronize** all Freedom Clients & Servers that connect to the updated device. You do this by 'right' clicking over the device name in 'Device Setup' & select '**Synchronize Camera List**'

Device Configuration



CAUTION : Modifying the settings of a device should only be performed by a qualified CCTV Engineer who understands the limitations of the device they are modifying, "YOUR" **recording / retention** requirements and "YOUR" sites sub-stream bandwidth limitations. **Note:** You must have 'Setup' rights to configure a device.

Within Freedom VMS there are two configuration options, **Basic** and **Remote Configuration**.

Basic configuration allows you to change the device connection settings and the encoding settings for each camera under that device. **Remote configuration** opens the devices 'web page' which allows for more advanced configuration options.

Basic Configuration (Encoding)

(Figure 3.0) Basic configuration allows you to set the type of encoding, image quality, framerate, Bit Rate Control, Image size, audio and Maximum Bit Rate for both 'Main stream' and 'Sub stream'.

Note: Because IP camera options and settings vary greatly we recommend pre-configuring IP cameras via their web page before adding them to the Freedom VMS.

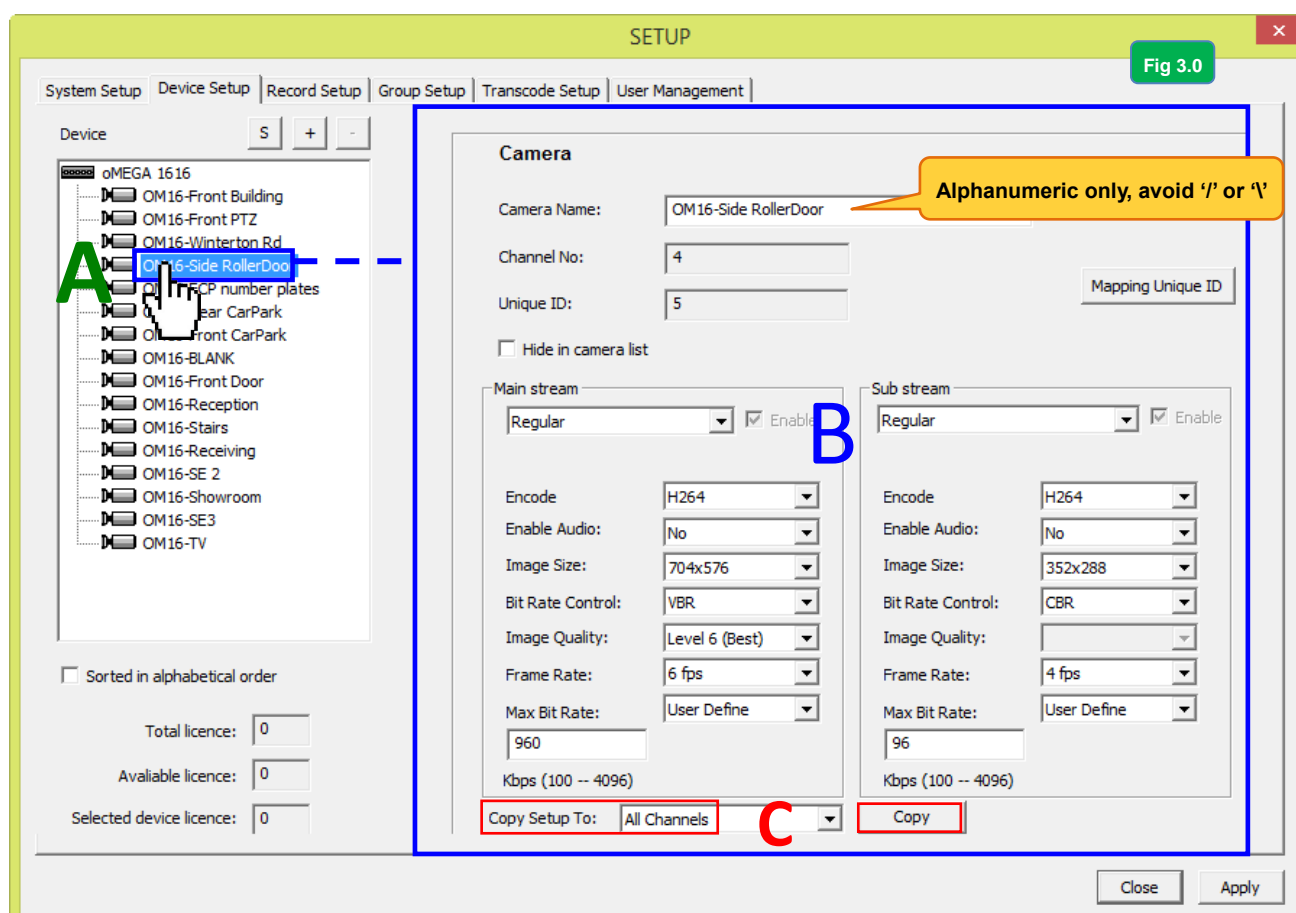
IMPORTANT: When setting your encoding settings **DO NOT FORGET** to also change the **Motion & Alarm** settings otherwise your expected storage retention goals may not be met.

Using Basic Device configuration

From the 'Live View' screen navigate to **setup** icon, then click the '**Device Setup**' tab.

The settings you select for these fields affect the quality of your recording and how long footage is retained before being over written. To change an encoding parameter click on the **camera name** in the left 'Device' window (A) then in the right window (B) make your changes, always to click the '**Apply**' button to save your changes, if wish to save these changes to 'All' cameras within the currently selected device, select '**All Channels**' from the '**Copy Setup to**' dropdown list then click '**Copy**'

Note: Device and camera names should only contain alphanumeric characters (hyphen and underscore excepted)

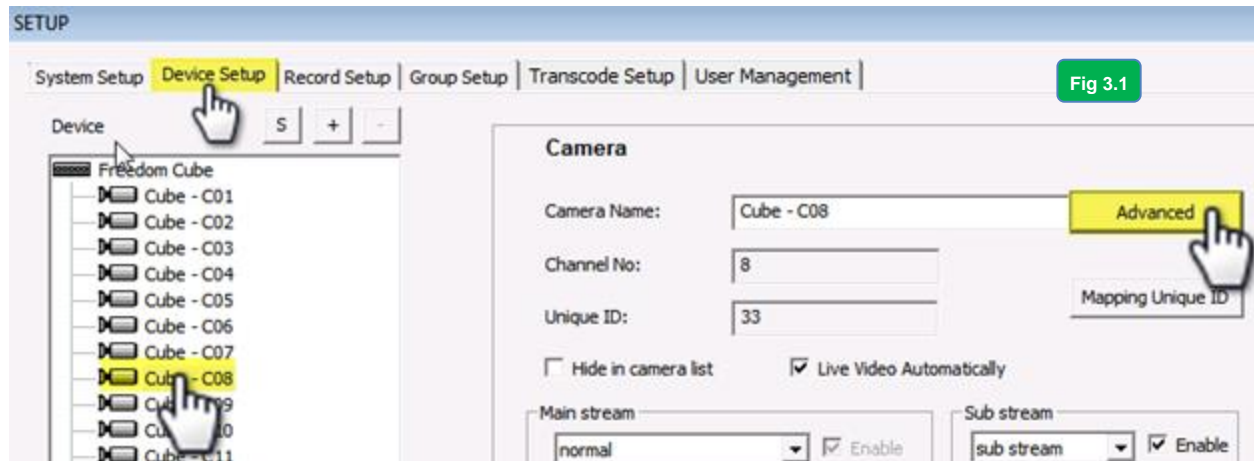


Advanced Camera setup

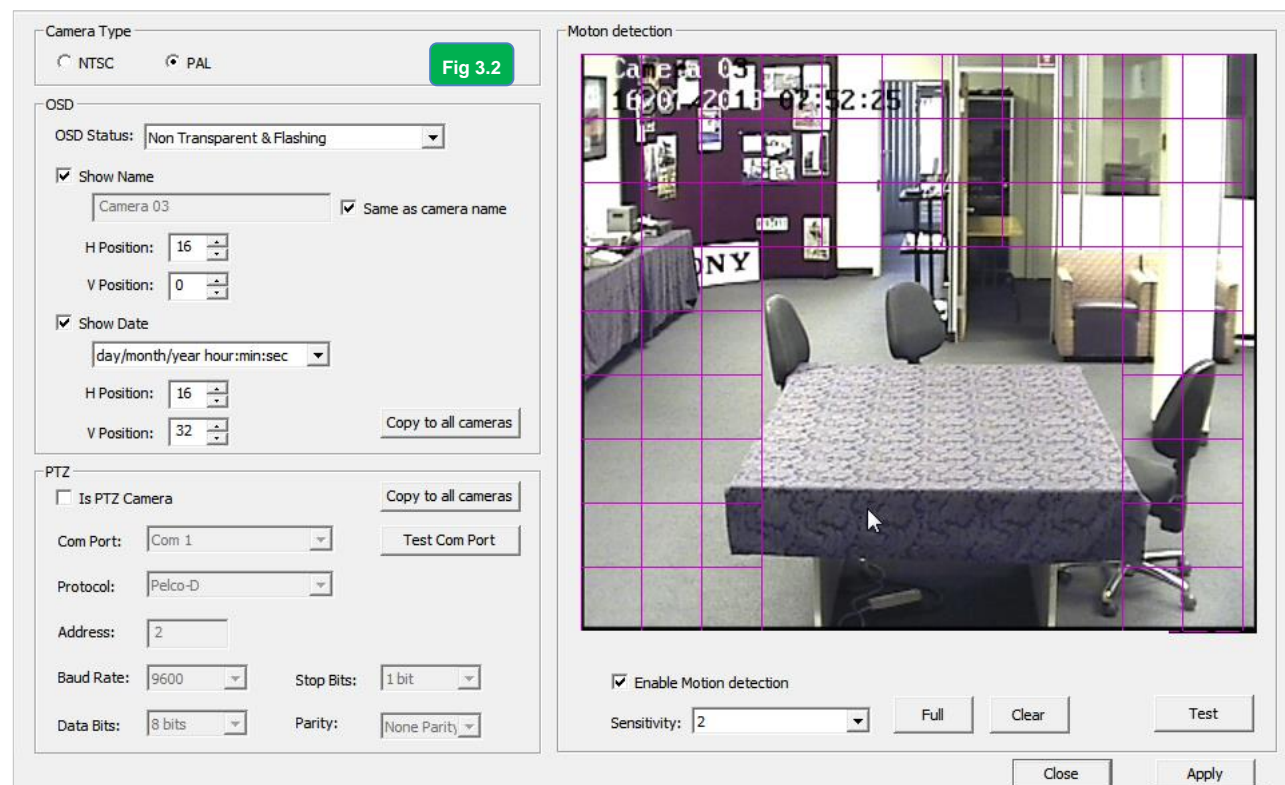
The Advanced Camera Setup is where you can configure motion detection for cameras connected to on-board encoder cards, camera text overlay options and PTZ (Pan Tilt Zoom) camera configuration.

Navigating to the 'Advanced' camera setup. (See Fig 3.1)

Click  **Setup** → **Device Setup** → click the camera  you wish to configure → click the 'Advanced' button.



Below: 'Advanced' camera setup window.



Setting up Motion detection

Motion detection configuration varies depending on the type of device you are setting up. For IP cameras and encoders motion detection must be configured from the devices 'web page', which is accessed in Freedom by 'right clicking' over the device's name in the device setup list (see **Remote Configuration**.)

Motion detection for cameras utilizing the on-board encoding cards can be configured directly in Freedom by clicking on the camera 'name' you wish to configure in the 'Device setup' window, then clicking on the '**Advanced**' button (Fig 3.1)

Motion Detection setup (on-board encoder cards)

(Fig 3.3) shows the motion detection setup for on-board encoding cards.

Note: IP camera motion detection is configured within the cameras Web Service page. (see **Remote Configuration**)

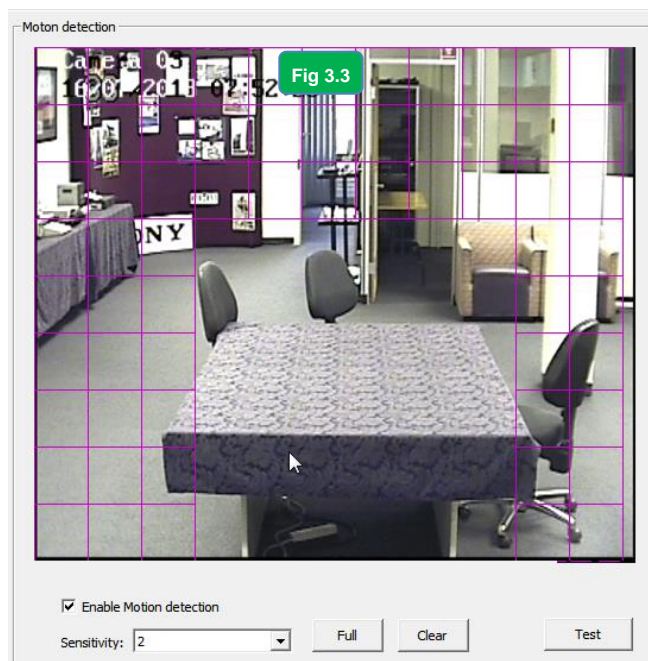
By default the motion detection area is set to cover the entire video image.

Each purple square indicates motion detection is enabled for this area.

Areas of the video image where purple square/s are not present indicate the area is excluded from motion detection.

To select or de-select an area for motion, drag with your mouse from the top left motion tile to the right of the area you wish to select or de-select. To disable motion detection all together, un-tick the 'Enable Motion detection' box.

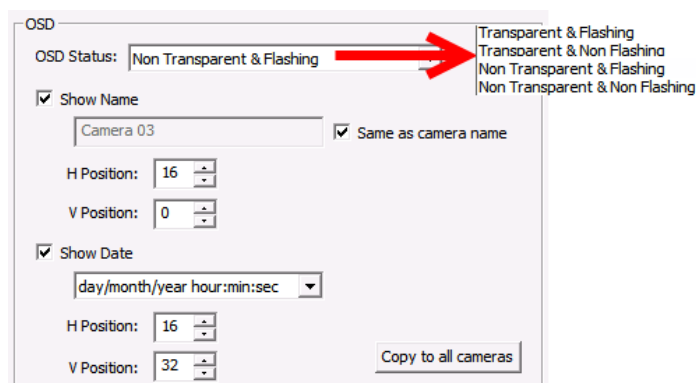
Sensitivity can be adjusted by selecting a value from 0 to 6 where 0 is the highest sensitivity and 6 is the lowest sensitivity. To test your current motion setting click on the 'Test' button, when motion is detected the motion tile/s where motion occurred turns from purple to green.



Camera Overlay options

To change overlay options click the **Setup** icon  → **Device Setup** → click the camera  you wish to configure → click the '**Advanced**' button.

From here you can change whether to show the camera name and/or date and you can also change the horizontal and vertical position overlayed text on the video image

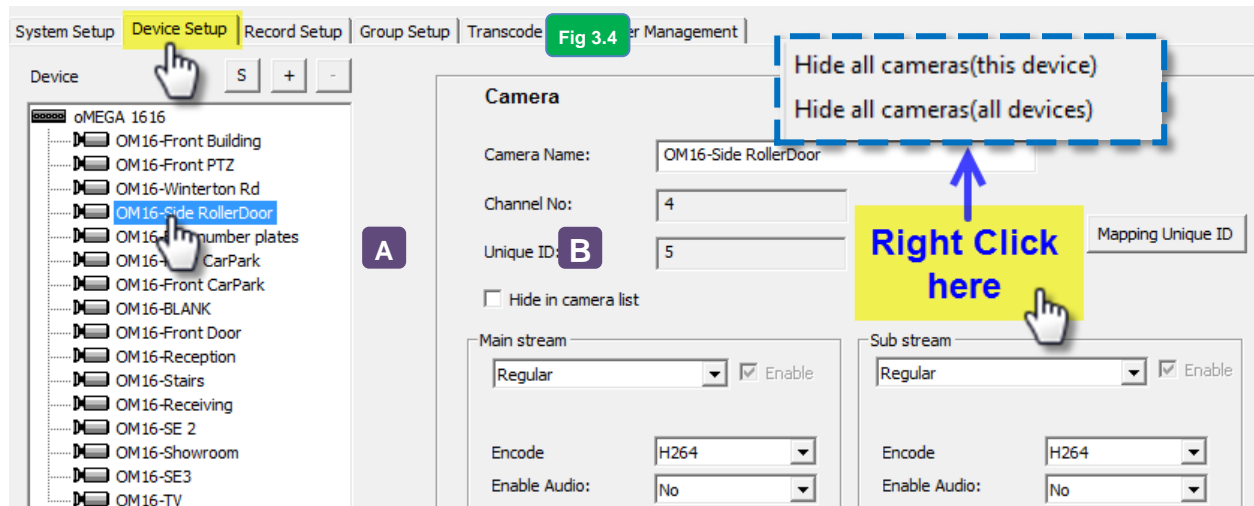


Hide in camera list

If you wish to hide a camera from users so it does not appear in the device list, yet will still be recording you can tick 'Hide in camera list' tick box (**Fig 3.4A**) for each camera you wish to hide. To use this feature efficiently the administrator should create a 'limited operator' account for the user to use. (See User Management section)

Hide all cameras shortcut

To quickly select all the cameras from a device/s 'right-click' over an empty area of the configuration window (indicated by yellow highlight below) and choose from the option pictured on right.



Device context options:

Right clicking over a device in the device list gives you the following options.

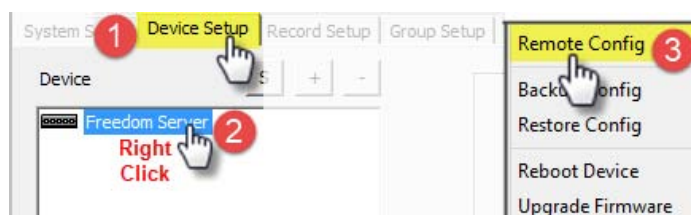
- **Remote Config** → opens the devices web configuration page, which allows you to configure settings on the remote device.
- **Backup Config** → backs-up a devices configuration.
- **Restore Config** → Restores a devices configuration.
- **Reboot Device** → Restarts the device.
- **Upgrade Firmware** → Allows you to perform a firmware update.
- **Synchronize Time** → Pushes current time to device.
- **Re-login** → performs a re-login to remote device or Server
- **Synchronize Camera List (One Device)** → Performs a sync to the device you 'right clicked' on.
- **Synchronize Camera List (All Device)** → Performs a sync to all devices.

Remote Configuration

Remote Configuration allows you to configure a device directly; this allows you set more advanced settings within the device using the device's 'Web Service' configuration page.

Tip: If you want the ability to configure your device over the internet you must port-forward both the **HTTP port** and the **TCP port** of the device and the HTTP port should **NOT** be left at 80

Before entering a device's configuration page you must configure your 'Internet Explorer™' browser, (see 'Internet Explorer configuration' on next page)



'Right clicking' over device name in device list, and select 'Remote Config' from the context menu

To enter Remote Configuration click the **setup** icon from Live View, then click the '**Device Setup**' tab. **Right click** over the **name** of the device you wish to configure and select "**Remote Config**". The first time you enter 'Remote Config' you will be prompted to install the device's ActiveX application. You do this by clicking on the '**Allow**' and '**Install**' buttons when they appear at the bottom of the web page. If installation is successful a login window appears prompting you for a username and password.

Note: If connecting to a device off-site please be patient sometimes the ActiveX Install prompt does take longer to appear depending on your remote site's network upload performance.


Internet Explorer™ configuration

Open an instance of Internet Explorer (standard or desktop).

There are three general settings must be changed in order for ActiveX control to install and work correctly.

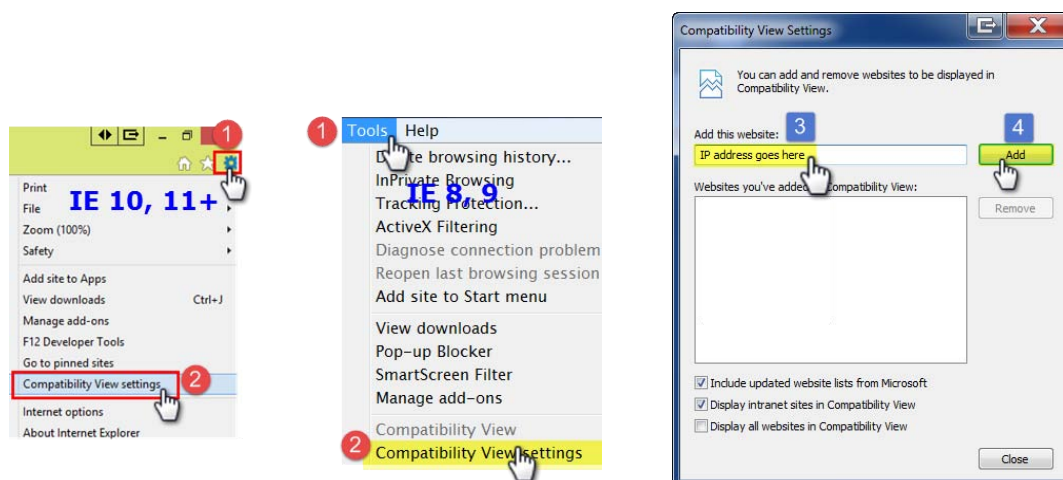
1. Add devices IP address to 'Compatibility View Settings'.
2. Add devices IP address to 'Trusted sites' list.
3. Modify 2 items in the security configuration 'Internet Zone'.

Compatibility View Settings

Navigate to IE 'Tools' menu, if you have versions 8, 9 you may need to press the <ALT> key to expose the 'Tools' menu, on versions 10,11 click on the cog  icon in the top right of the window.

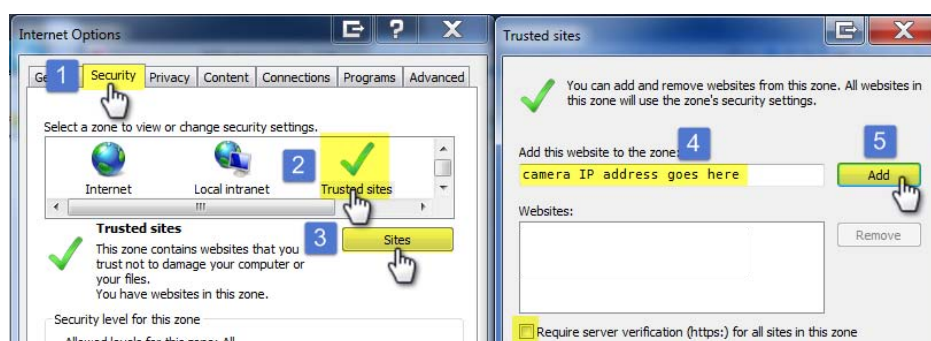
1. Add IP address to **compatibility view** sites.

Navigate to '**Tools**' → '**Compatibility View Settings**' and add the devices IP address.



Add IP address to 'Trusted sites'

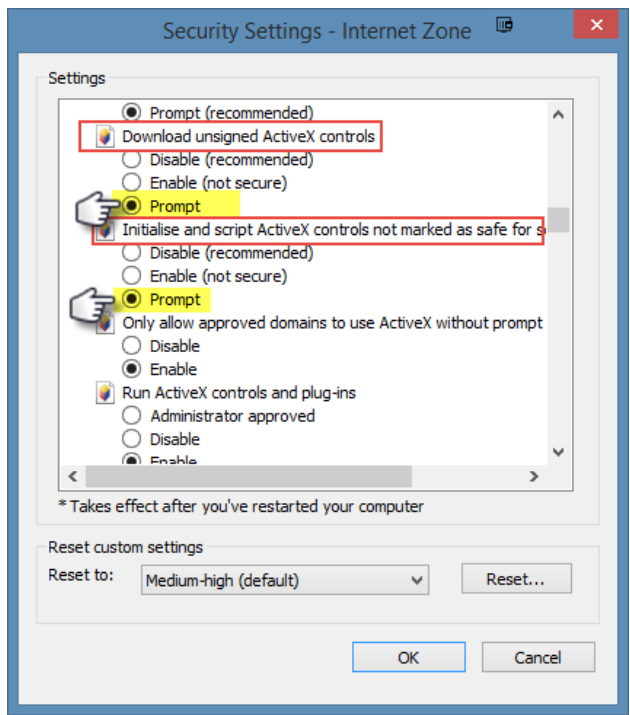
Navigate to **Tools** → **Internet Options** menu then click on the 'Security' tab then click 'Trusted sites' zone, then click the 'Sites' button, then enter devices IP address in the input box, then un-tick 'Require server verification' Option down the bottom and finally click the '**Add**' button.



Modify 'Internet Zone' settings

To navigate to 'internet options' menu in any version of Windows click on the Start menu and in the run box type **'inetctl.cpl'** then press **<ENTER>**, then click on the 'Security' tab.


Change the settings for '*Download unsigned ActiveX controls*' and '*Initialise and script ActX...not marked as safe*' to '**Prompt**'. Then press 'OK'. **Warning!** Do not change any other settings.



Running ActiveX control for the first time

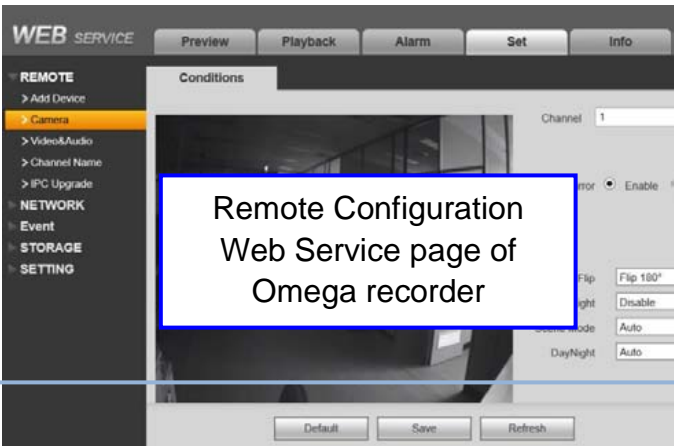
The first time you open the devices web page you will be prompted to install the ActiveX configuration control.

You do this by clicking on any of the following when they appear, **'Download plugin'**, **'Run control'**, **'Allow'**, **'Install'** buttons that appear either in the middle or bottom of the current window. Note: sometimes this process may take up to 30 seconds depending on network conditions.

You may need to repeat these steps a few times or hit the 'refresh' key on the keyboard, (**F5**) or  in IE.

When you have finished changing the settings click **OK**, confirm settings, click '**OK**' again then **Restart** Internet Explorer and navigate to '**Remote Config**' again as described above and **wait about 20 seconds** and the login screen should appear.

When you enter a device's 'Web Service' page you are modifying settings within the actual device itself, the settings available here can affect the quality, reliability and how long your footage is retained for. (How much hard drive space is used.) Whenever you make changes to a device in Remote Config it is recommended that you **re-boot the device** after making the changes and **check the settings** again to confirm they have been applied to 'each' channel



Synchronizing Camera List


Whenever a 'remote' device in the 'device list' has been modified, for example cameras or devices have been **added, removed renamed or re-ordered**, you must **Re-Synchronize** all Freedom Clients & Servers that connect to the updated device. You do this by 'right' clicking over the device name in 'Device Setup' & select '**Synchronize Camera List**'

Synchronization ensures that 'your' Freedom software camera list is the same as the remote device/s cameras.


To perform a device synchronization navigate to '**device setup**' single click on the device's name in the list then '**right**' click over the devices name and select '**Synchronize Camera List**'.

Remote Config
Backup Config
Restore Config
Reboot Device
Upgrade Firmware
Synchronize Time
Re-login
Synchronize Camera List(One Device)
Synchronize Camera List(All Device)

Rebooting a device

From the 'Live View' screen click setup icon,  then click the '**Device Setup**' tab, right click over the device you wish to reboot and select '**Reboot Device**' from the menu.

Backing up / Restoring a device configuration


To backup or restore a device's configuration click the 'setup' icon  then click the 'Device Setup' tab (Fig 1.0A) then 'right' click over device name in the 'device list' and choose either 'Backup Config' or 'Restore Config' from the menu.

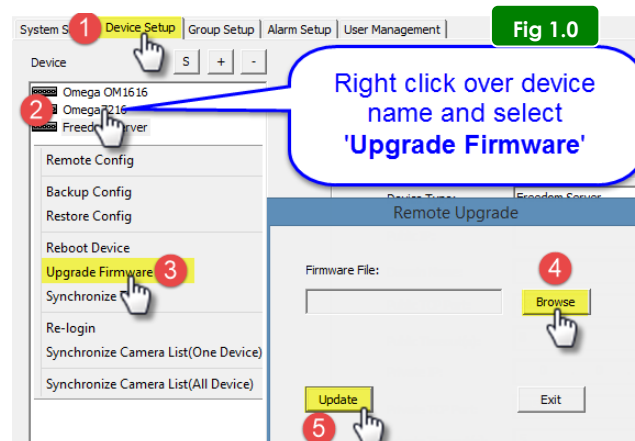
Firmware Upgrade

Before performing any firmware upgrade you should do the following.

- A. Restart the device.
- B. Backup the configuration of the device.
- C. Ensure power to the device is NOT interrupted during firmware upgrade.
- D. Double check you have the correct firmware & firmware file/s has been unzipped.
- E. Make sure the firmware upgrade is taking place on a LAN not over a WAN (internet) environment.

Open the Freedom Client V3.x software.

1. Click on the setup icon  located in the bottom right of the screen.
2. Click on 'Device Setup' tab (Fig 1.0).
3. Right click over device name and select 'Upgrade Firmware' from the menu
4. When remote upgrade window appears click the 'Browse' button navigate to firmware file location, click on the firmware file then click the 'Update' button.

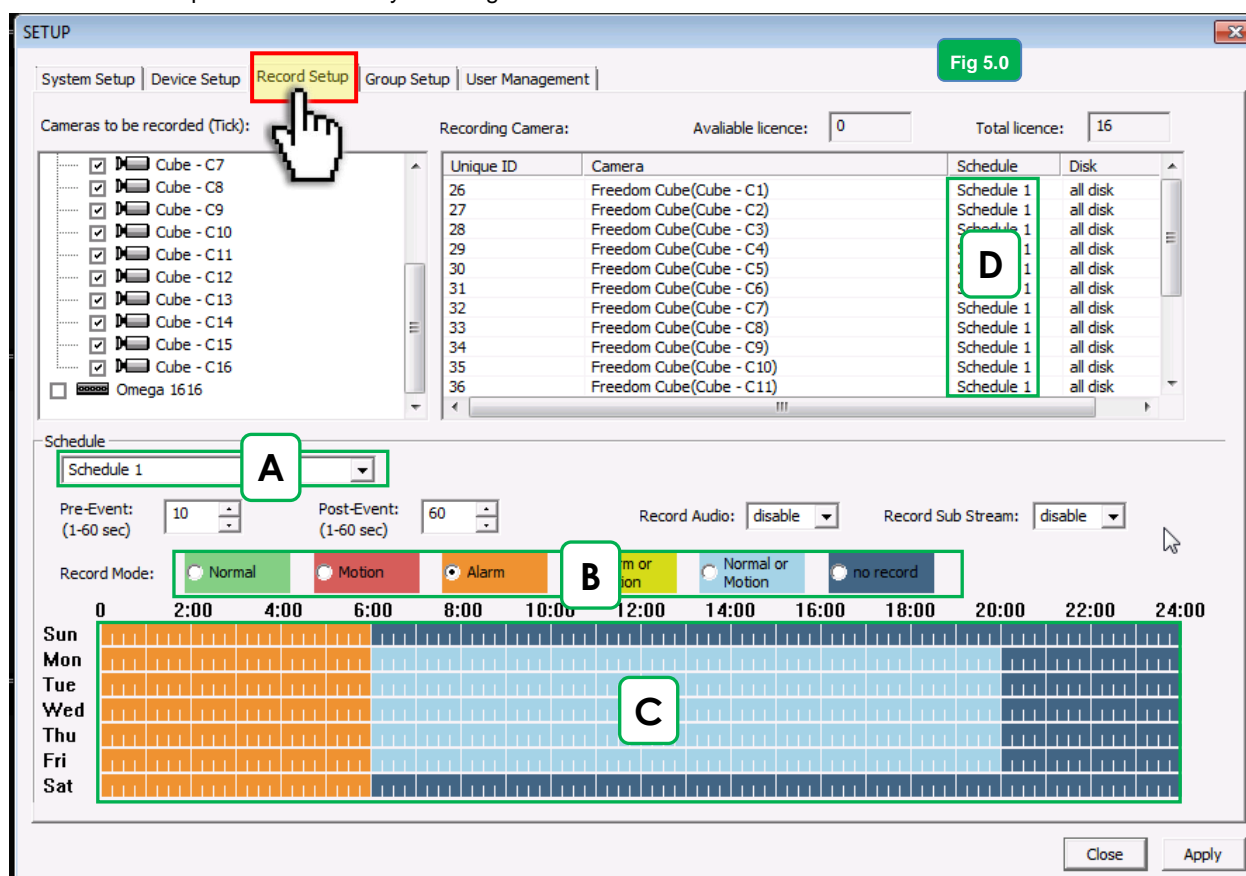


5. **Note:** the success notification message is an indication that the file has been sent successfully, the firmware upgrade itself is still in progress, please wait about 7 minutes after seeing this message before attempting to connect to device.
6. Reboot device again after firmware upgrade has completed by 'right' clicking over the device name in setup and choosing 'Reboot Device'.
7. Use the backup you performed earlier to restore previous settings.
8. After restoring the device settings from your backup **CHECK ALL SETTINGS**.

NOTE: Always check all settings 'AFTER' the upgrade has completed and the recorder has been re-booted.

Recording Setup.

The Record Setup section is where you configure how cameras will be recorded and when.



Steps to Configuring a Recording Schedule.

The most efficient way to setup recording schedule's for cameras is to first create 'all' your schedules then assign a cameras to each schedule.

1. Place a tick in all the cameras you wish to record.
2. Select schedule number (Fig 5.02A) (Schedule 1 is default)
3. Select your 'Recording Mode' (Fig 5.02B) eg ☒ Normal or Motion and your preferred 'pre' and 'post' event duration and whether you wish to record **audio** and or record the 'Sub Stream' as well.
4. Drag an area of the timeline you wish the camera/s to be recorded on, the selected area should be the colour of the selected 'Record mode' (Fig 5.0C). In the example above, 'Schedule 1' has 3 different recording modes. 'Normal or Motion' & 'Alarm', & 'No Record'.
5. When finished creating the schedule click 'Apply'.
6. If you need to create other schedule/s select the next un-used schedule (Fig 5.0A) from the drop down list (i.e. 'Schedule 2') then repeat steps 3, 4 & 5.

7. The next step is to assign cameras to a particular 'Schedule' and select which hard disk you want the camera to be recorded on.

To do this click on the text corresponding to the camera you wish to assign a schedule to. (Fig 5.1)

Recording Camera:		Available licence:	Total licence:
		Fig 5.1	16
Unique ID	Camera	Schedule	Disk
26	Freedom Cube(Cube - C1)	Schedule 1	all disk
27	Freedom Cube(Cube - C2)	Schedule 1	all disk
28	Freedom Cube(Cube - C3)	Schedule 1	all disk
29	Freedom Cube(Cube - C4)	Schedule 1	all disk
30	Freedom Cube(Cube - C5)	Schedule 1	all disk
31	Freedom Cube(Cube - C6)	Schedule 1	all disk
32	Freedom Cube(Cube - C7)	Schedule 1	all disk

This opens the 'Record Setup' window. (Fig 5.2)

To assign a Schedule to a camera click on the drop down icon and select the Schedule you wish the camera to be set to.

You can also specifically select which hard disks will be used to record this camera or excluded from recording this camera.

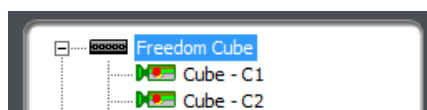
The default: recording hard disks is 'all' disks.

To include a specific disk for the recording of a camera, click to highlight disk drive (Fig 5.2A) then click on >> to include disk.

After completing selections click the 'Save' button.

Repeat this step for all cameras you wish to record.

Note: When a camera is recording a red dot appears in the camera icon in the 'device list' in the 'Liveview' screen of the Freedom Server that the camera/s is currently being recorded on. (Pictured below)



Transcode Setup

The transcode feature provides a number of lower quality video streams to optimize video streaming over low bandwidth connections which otherwise would not allow the higher quality 'main stream' to be viewed or played back.

Freedom transcode is used for two purposes.

- Allows mobile access to Freedom Servers 'Pro' and 'Lite'
- Allows 'transcoded playback' on Freedom Clients from Freedom Server Pro versions.

This is where you set the encoding and bitrate parameters for the low bandwidth transcoded streams which are used by the Freedom Client software to playback footage over low bandwidth connections. There are 3 quality settings 'low', 'normal' and 'best'. The available options are;

Encode option	Image size	Frame Rate	Bitrate
Low	176x144 (QCIF)	1-6 FPS	48 -128kbps
Normal	352x288 (CIF)	1-4 FPS	96-256kbps
Best	704x576 (D1)	1-2FPS	128-384kbps



Camera Group Setup.

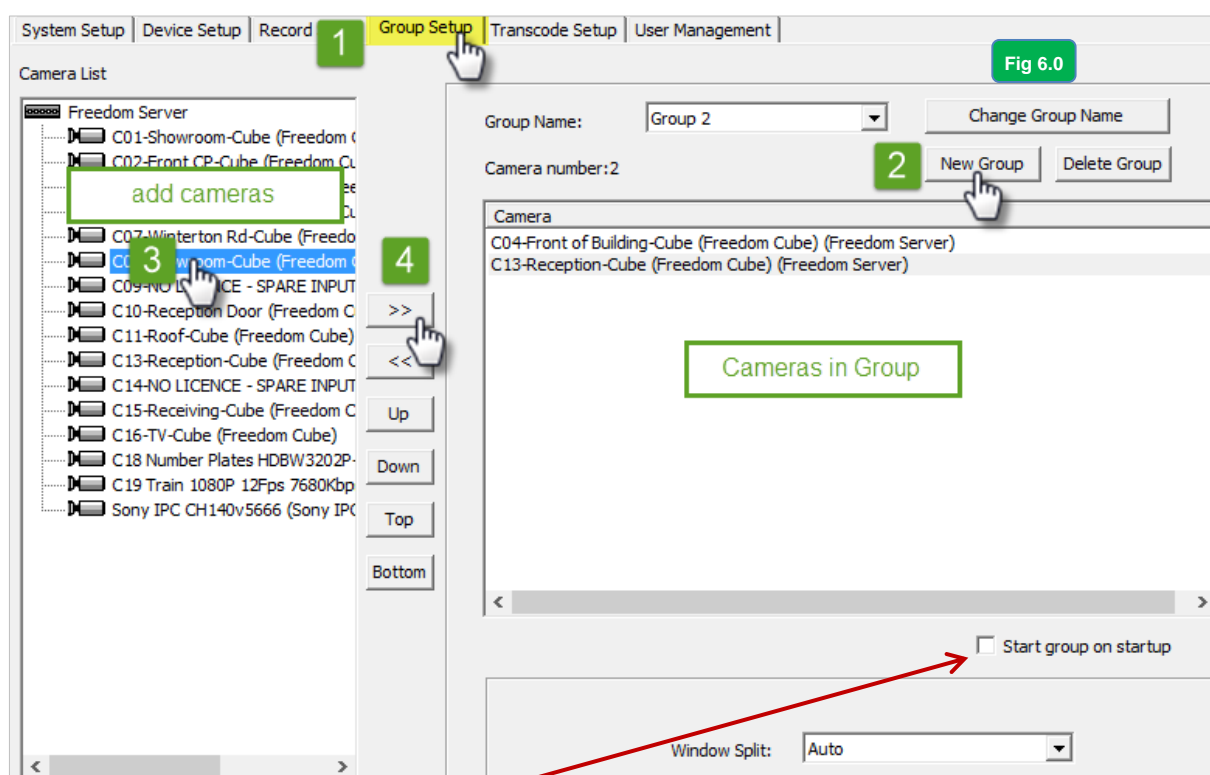
In Freedom Server a '**Group**' is a selection of logically related cameras. The purpose of a group is to make it easy for an operator to quickly bring up a group of cameras without having to individually select each camera. Groups can be used to quickly open a group of cameras, some examples of a group may be ;

EXAMPLES OF TYPES OF CAMERA GROUPS		
Entrances and Exits	POS	Computer Rooms
Block A, B, C etc (Building Names)	Loading Bays	High Risk Areas (stairs, Lanes etc)
Car Parks	Lockers	Gaming Area1, Gaming Area2

Creating a Group.

To create a camera Group following these steps (Fig 6.0)

1. Click on the '**Setup**' icon. 
2. Click on the '**Group Setup**' tab
3. Click the 'New Group' button
4. Click the '**Change Group Name**' button & give the group an appropriate name (examples listed above).
5. To add cameras to a group click the camera you wish to add & click the  button
6. Repeat step 5 for the remaining cameras you wish to add to the group.
7. By default Freedom Server will choose a window layout that accommodates all your cameras but you may want to use a different layout, for example if you have a smaller display, you may want to display each camera on a single larger window one at a time, to do so, change the **Windows Split** option to **1 Window**.
8. To finish setup click '**Apply**', '**OK**' then click '**Close**'.



Automatically open a group of cameras on startup

If you would like a group of cameras to automatically start when Freedom starts, select the desired group from the 'Group Name' drop down menu (2) then tick the 'Start group on startup' option.

User Management.

Freedom VMS software is initially configured with 1 user account called '**admin**' with the no password and a remote viewing account called 'mobile'

It is recommended that a password be configured as soon as possible.

Please remember this password, there is no way to retrieve if lost or forgotten.

In Freedom VMS there are 3 authentication levels 'Operator', 'Manager' and 'Remote viewer'(Server only)

Operator = can be configured to do everything except alter any user account.

Manager = Is pre-configured for full rights including ability to modify any user account except 'admin'.

Remote viewer = Pre-configured to have NO 'Setup' or 'User access rights', it can only be configured for Viewing, Playback, Footage download and PTZ control rights.

Note: a 'Remote viewer' type of user account cannot be used 'locally' at the Server

Camera or device rights are broken down in 4 common CCTV activities

Live video rights → can user view these camera/s?

Playback rights → can you playback footage from these camera/s?

Footage download rights → can user download footage from these camera/s?

PTZ control rights → can user control PTZ cameras?

There are also '**setup**' rights that control whether a user can access various settings and features within the Freedom software and whether they have rights to configure certain features and devices within the software.

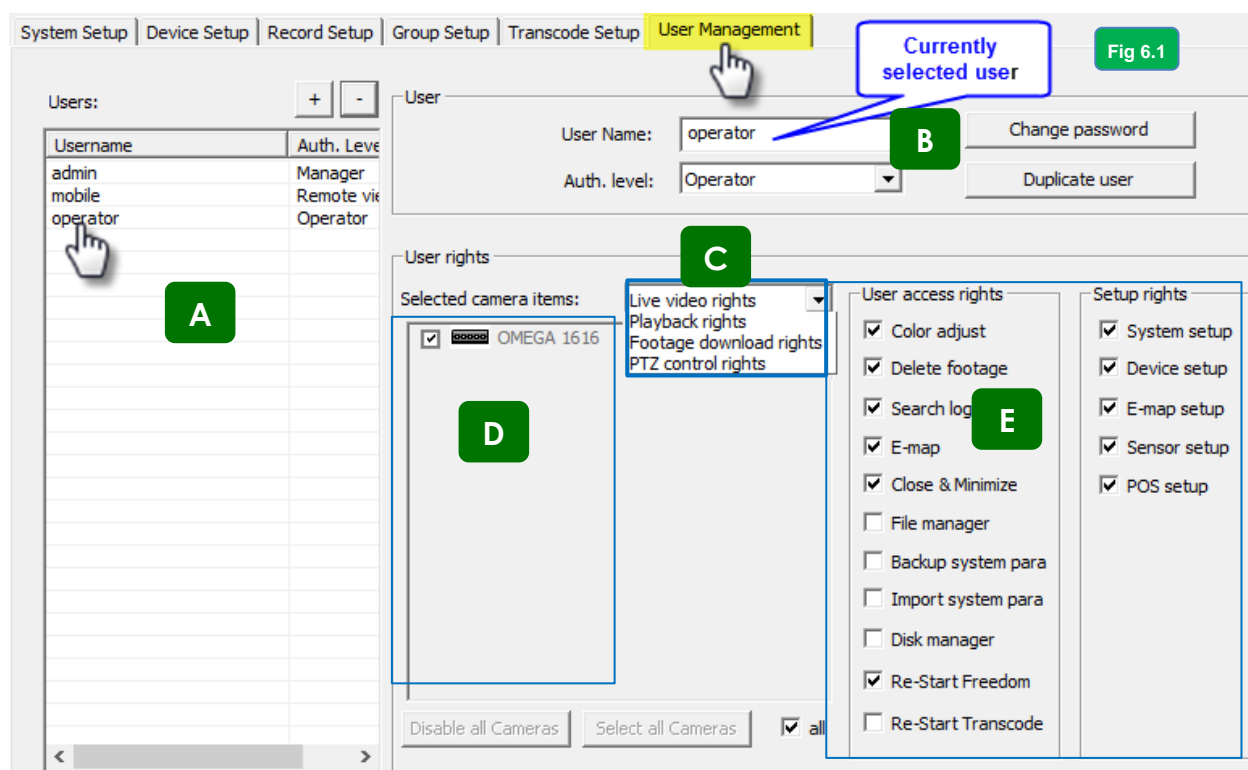
The User Management section controls **who** is allowed to access Freedom Server and **what tasks** that user can perform.

User rights can be modified for the following items.

1. What cameras or device the user is allowed to view.
2. Whether user is allowed to adjust colour settings.
3. Whether user is allowed to playback footage.
4. Whether user is allowed to backup footage.
5. Whether user is allowed to delete footage.
6. Whether user is allowed to search logs.
7. Whether user is allowed to control Pan Tilt Zoom cameras.
8. Whether user is allowed to use E-maps
9. Whether user is allowed to setup E-maps
10. Whether user is allowed to backup or save the system configuration.
11. Whether user is allowed to modify System setup.
12. Whether user is allowed to access Device setup.
13. Whether user is allowed to setup sensors
14. Whether user is allowed to close or minimize software.
15. Whether user is allowed to configure Disk management.
16. Whether user is allowed to access File Manager.
17. Whether user is allowed remote access.
18. Whether user is allowed to restart the software.

Fig 6.1 illustrates the layout of the User Management section of Freedom Server. The pre-configured '**admin**' has an Authorization Level of **Manager** which includes access to all devices and privileges to change all settings.



User management has a number of shortcut features designed to make user permission setup easier, these shortcuts are the 'Disable all Cameras', 'Enable all Cameras' and the 'Duplicate user' buttons.





Note: the '**all**' tick box allows you to quickly select configured permissions to apply to all devices in the device list.

Adding a user


To add a user with limited access to Freedom VMS do the following;

Tip: to quickly select or deselect 'all' cameras under a device tick the box   on the left of the top level device name.

1. Enter the **Setup** menu 
2. Click on the “**User Management**” tab.
3. Click the ‘**plus**’  icon to add a user. (Fig 6.1)
4. In ‘**User Name**’ input box, enter the preferred name of user. (Fig 6.1B)
5. Click ‘**Change password**’ button to create a password for the user. (**Make sure you remember this**)
6. Now click the ‘**Apply**’ button then ‘**OK**’ to confirm user.
7. Now **select** the newly added user by **highlight** their name. (Fig 6.1A)
8. In the ‘**Auth. Level**’ drop down list select ‘**Operator**’. (Fig 6.1B)
9. Now select the type of privileges you wish the user to have from the dropdown list and check boxes.
10. Now in the device list (**Fig 6.1D**) tick or un-tick the device that these privileges are associated with.
11. Repeat steps 9 and 10 for each privilege type from the list.
12. Now tick or un-tick the user access rights and setup rights you wish the user to have (**Fig 6.1E**)
13. After completing all modifications to privilege click ‘**Apply**’ button, then ‘**OK**’ to save your modifications.

Deleting a User

Enter the **Setup** menu 

1. Click on the “**User Management**” tab.
2. Highlight the User’s name User list (Fig 6.1 Part A)
3. Check to see that the User you wish to delete is now listed in the “**User Name**” input box. (Fig 6.1 Part B)
4. Click the ‘**minus**’  button to delete the user.

Duplicating a user

Enter the **Setup** menu 

1. Click on the “**User Management**” tab.
2. Highlight the User’s name in User list that you wish to duplicate (Fig 6.1 Part A)
3. Click the ‘**Duplicate user**’ button
4. Give the new user a name.
5. Click the Apply button

When setup correctly, eMaps greatly improve the User experience by allowing the User to visually select a camera from a map representing the site. EMaps require two monitors and a conventional mouse.

There is a video tutorial on using eMaps within Freedom, the URL is listed below.



www.freedomvms.com/tutorials/Freedom/Reviewing_Footage_using_eMaps.html





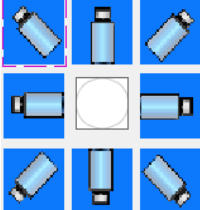



eMap icons and controls.


With FreedomVMS eMaps the User can select the default icon/s or create & use their own customized icons.

Each icon has 2 states an 'Off' state and an 'On' state. The **Off** state indicates the camera is **NOT** being displayed in any '**Live View**' video tile or '**Playback**' video tile. The **On** state indicates the camera **IS** being display in a '**Live View**' video tile or '**Playback**' video tile.

eMap icons

Note: The icons below may be different depending on what software version you have, however they still perform the same function.

Default camera Off icon	Default camera On icon	e-Map hyperlink icon	Move Tool & Zoom controls	Default camera icons
				
 SEMI -TRANSPARENT	 SEMI -TRANSPARENT	 SEMI -TRANSPARENT		

Note: The move  tool only works when you are **zoomed in** on the eMap.

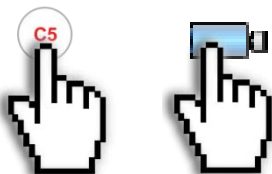
Hiding the Control tool. If you find the control tool is getting in the way you can close it by right clicking over eMap area and selecting '**Hide control panel**'.

Using eMaps in Freedom


To open the eMap window you click the eMap icon.



Selecting a camera.



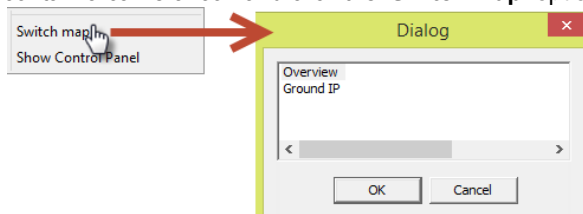
NOTE: The clickable or draggable region of the camera icon is the grey circle enclosing a **RED** number or on the **blue** camera icon.

Drag the grey **C5** circular icon or the blue camera icon  to the video tile you wish the video to appear in, or double click the camera eMap icon to place the video in the currently selected tile.



Navigating to a different eMap.

There are two methods of navigating to another eMap. The first is by '**Right Clicking**' over any area of the map that doesn't contain a camera icon and click the '**Switch Map**' option. The second method is to clicking the eMap hyperlink button.



(eMap map hyperlink button)



Getting information about a camera on an eMap

To obtain more information about a camera you can '**Right click**' over the camera icon and select '**Camera attribute**'. The information you receive will include the Camera Name, the Unique ID, the Name of the device the camera is connected to and the camera title.

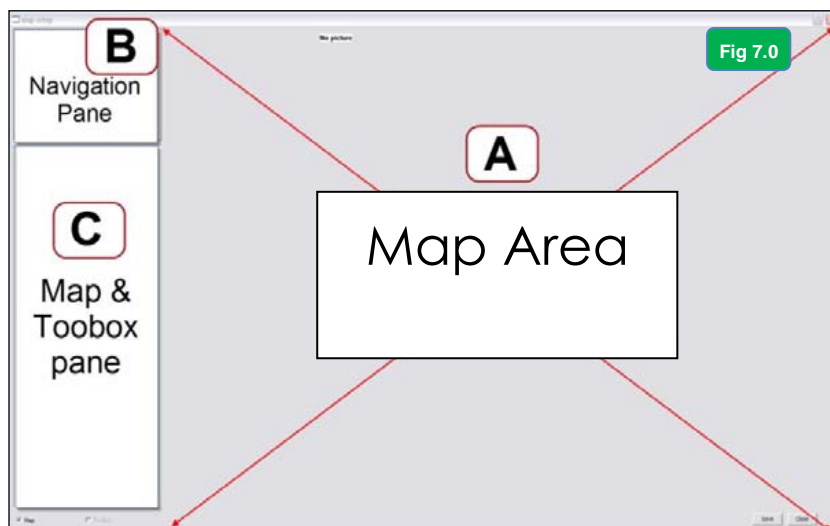
Creating an eMap.




Video tutorial at www.freedomvms.com/tutorials/emaps

The E-map setup screen is divided into three sections. (**Figure 7.0**)



- A. The Map image area (**Fig 7.0A**).
- B. The Navigation pane to move around the eMap.
- C. The Map & Toolbox pane allows you to select maps and modify equipment on the maps.



To create a new E-map, follow these steps.

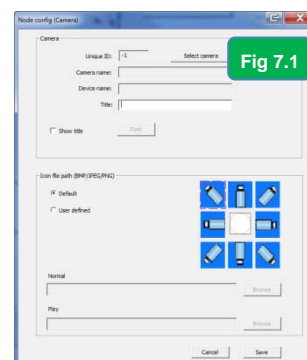
1. In Live View click the 'Up arrow icon'  and choose '**eMap Setup**' from the popup menu.
2. Right click over the Map & Toolbox pane (**Fig 7.0C**) and select '**New Map**'.
3. Enter a descriptive name for your E-map, some examples may be ;→ Blogs Hotel – Level 1, Blogs Secondary College – A Block, Gaming Room 1, Morton Hill - Loading Depot.
4. Click the Browse button to locate the image file you wish to use as the E-map background.

Images can be in JPG or BMP format and It's recommended that the dimensions of the eMap image be the same as the resolution of the monitor the eMap will be displayed on. If you wish to user an eMap as the 'default' map that loads when you click the eMap icon tick the 'Startup' box.


5. Click the 'Close' button to save the image to Freedom.
6. To Add Cameras to your map click 'Toolbox' radio button  at the bottom left of the screen.
7. Drag the camera icon  to the position you want the icon to appear on the eMap the node config window will then appear. (**Fig 7.1**)
8. In the 'Camera config' window, select the camera you wish to add by clicking the '**Select camera**' button
9. Click the plus '+' icon to the left of the name of the recorder or IP camera you wish to add.
10. From the expanded list, select (highlight) the camera you wish to add from the list then click 'OK'.
11. Title & font attributes can be edited from the 'Title' input box/'Font' button.
12. Choose the icon you wish to use to represent the camera, single click on the icon you prefer.

If choosing your own custom image, you must include both a **Normal state** (camera stream Off) and a **Play state** (**camera On**).

13. Click '**Close**' to save Camera configuration and close window.




Editing eMaps

To edit an existing e-map navigate to **E-map Setup** by clicking on the 'Up' arrow icon  and choose 'E-map Setup' from the popup menu. Select the E-map you wish to edit by 'double clicking' its name in the E-map panel (**Fig 7.0C**).

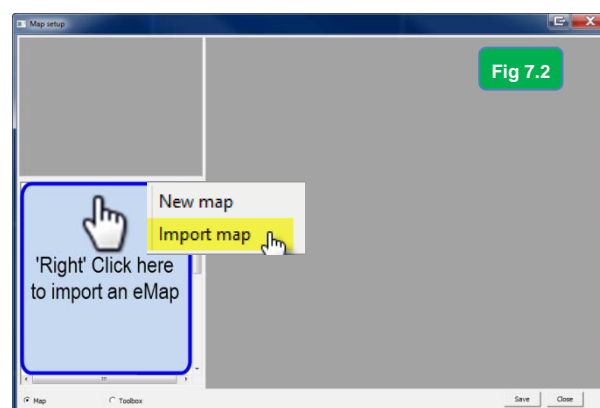
- To **CHANGE** existing **CAMERA** to another camera do the following.
 - **Right click** over camera and click 'Configure Hyperlink'.
 - Now select the camera you wish to add as described earlier in "Creating eMaps" section.
 - Click the 'Close' button after changes have been made.
- To **DELETE** a **CAMERA** from an eMap.
 - Right click over the camera and choose 'Remove Hyperlink'
- To **MOVE** a camera to another location on the map simply drag the icon to the desired position.
- To **CHANGE** the eMap image.
 - Enter E-map Setup as described above, then 'right click' over the E-map name you wish to edit and select 'Map config' from menu popup.
 - Click the 'Browse' button and select the new image you wish to use.

Importing eMaps

To import an eMap click on the  menu icon and select 'E-map setup', then 'right click' over the left map window area (**See Fig 7.2**) and select 'Import map' then browse to the location of the eMap and click 'open'.

Note: After importing the eMap you need to re-map the icons, which means point each camera eMap icon to its correct device-camera pair. The exception to this is when you have re-imported an entire Freedom configuration, which replaces all devices currently install with imported devices contained within the config file, that will include the correct logical IDs for each camera icon.

For a more detailed guide on importing & editing eMaps refer to, "[Freedom eMap installation Guide.pdf](#)".

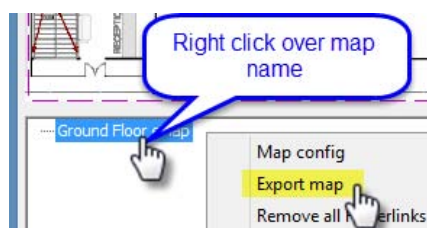


Backing Up and Exporting eMaps

Emaps from Freedom Servers can be exported to other Freedom Servers or Clients but remember you must re-associate the hyperlinks after importing the eMap/s.


While in **E-map setup**, right click over the **name** of each E-map you wish to backup and select 'Export Map'.

Make sure you see the map you wish to export in the right window pane before selecting 'Export map'.cgfdfdgdg

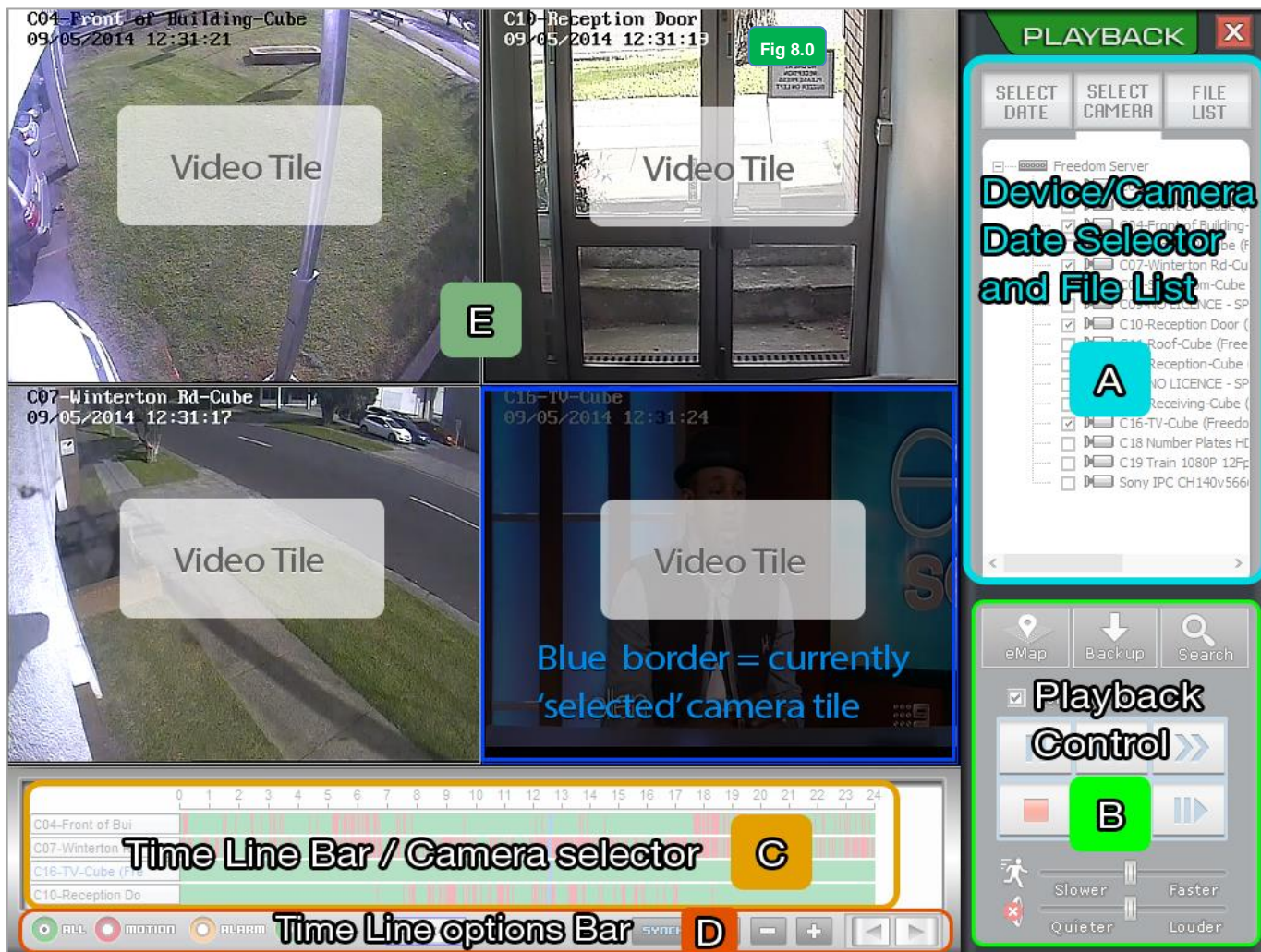




The **Playback** section is where you can **search**, **view** and **backup** footage to CD/DVD or USB.

To enter the Playback from the Live view screen click  playback icon.

Below (Fig 8.0) illustrates the layout of Playback section.



(Part A) Where you can select **Cameras**, **Date** and **File** you wish to playback.

(Part B) The **playback control panel** allows you to do the following functions.

- Initiate a search.
- Control video playback, i.e. stop, fast, slow etc.
- Backup/export downloaded footage.
- Change the layout of the Video tiles and activate E-map on playback.

(Part C) A coloured bar representing a 24hr period (default zoom) used for navigation and time selection control.

(Part D) Timeline options allow you to zoom in or out of the timeline and toggle synchronization on or off.

(Part E) Video Tile layout window is where the searched footage will appear in.

Right click context menus in playback

Synchronize with this camera → Time synchronizes all other cameras with selected camera

Close and Close all → Close closes single tile, close all, closes all video tiles.

Picture size → displays encoding resolution of camera with the tile

Reset Digital Zoom → Resets all tiles to an un-zoomed original view state.

Stream Quality → Allows you do choose the stream quality of the video in the current tile.

Note: Stream quality options will vary between, hardware models

Synchronize with this camera
Close
Close All
Picture Size
Reset Digital Zoom
Stream Quality

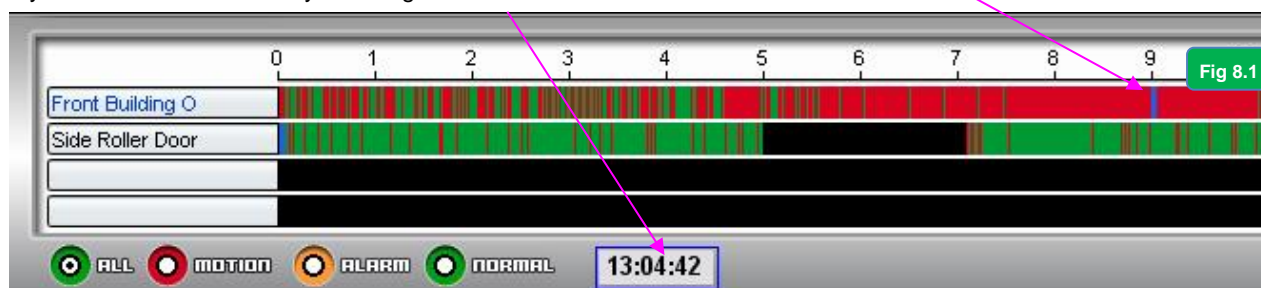
Understanding the Time Line

The Time Line is made up of 4 rows, (**Fig 8.1**) each representing a camera. In the example below there are 2 cameras that have had their index downloaded. The footage that is available for each camera is represented by the coloured bars.

Looking at the example below tells us the device is recording on a normal schedule (**Green**) and on motion (**Red**) any **black** areas indicate no recorded footage has been found or is available. The currently selected camera is

'**Front Building**', and the time line indicator bar for this camera is positioned at **~9.00AM**.

My mouse cursor is currently hovering at **13:04:42**



You can filter the type of recording displayed on the timeline by clicking one of the coloured radio buttons.

(**Fig 8.2**) The default is to display all types of recordings.

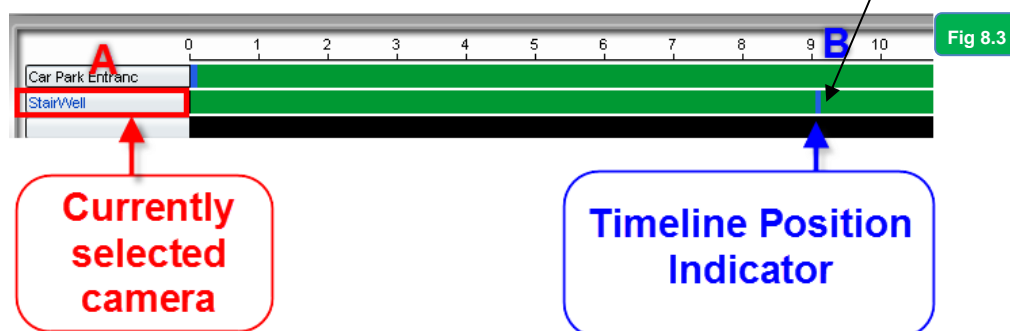
Green = **Normal** scheduled recording. **Red** = **Motion** detection recording. **Orange** = **Alarm** trigger recording.



To navigate the Timeline bar efficiently you must be aware what camera (row) is currently selected and the position you are at, within the Timeline bar. The currently selected camera is indicated by the **BLUE** text.

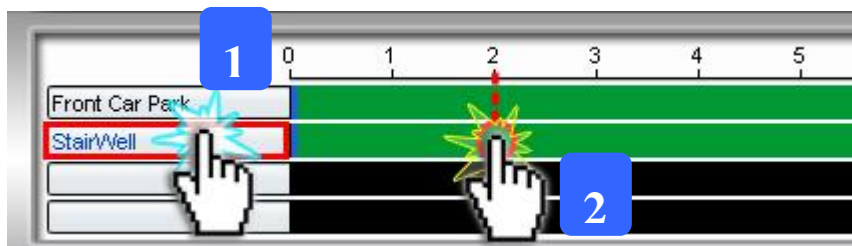
(**Fig 8.3 Part A**)

The current position you are at, within the Timeline bar is indicated by the "**Timeline Position Indicator**" which is the blue bar shown in (**Fig 8.3B**)



Navigating the Time Line bar.

The example below illustrates the steps needed to navigate to 2am on the Stairwell camera

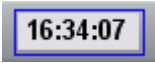


To navigate to a different time,



Double click just under the time you wish to navigate on the horizontal line representing the camera you wish to review.

In the example above we wish to review footage from around 2am, so we double click under the 2.

Time Position / Time Jump button;

 This dual purpose control displays the position of your mouse cursor relative to the actual time represented by the horizontal Timeline bar. **CLICKING** this control opens the “**Locate time**” window which allows you to select a specific time period to jump to.

Synchronize button

 This button allows you to synchronize all other cameras with the currently selected camera (blue outline) so they will all be playing at a similar time. Note: when footage is in ‘**Synchronized**’ mode the buttons text colour will change to blue.  You can also synchronize by ‘right’ clicking over the camera you wish the other cameras to synchronize with and select ‘**synchronize with this camera**’.

Note: By default playback is always synchronized.

Zoom In / Out






Buttons for zooming in and out of the timeline bar in increments of 60, 15, 7.5, 5, 2.5 minutes.

Move Left / Right









Move to the left or right of the timeline when zoomed in.


Playback Function buttons

	Open eMap window on second monitor.
	Download footage to your local hard drive and export to USB drive or CD/DVD .
	<p>Search for footage from recorders and review previously downloaded footage and images.</p> <ul style="list-style-type: none"> Search current date → Search footage from the currently selected date (default date is today) Search time period → Enter a time period you wish to search. (this is the quicker option off-site) Local Photo Search → Search photos on your local PC that has been previously captured. Local Video File Search → Search for footage that has been previously downloaded on your local PC.

☒ **Control all Video Tiles** If ticked (default), all the playback **control** buttons below will be applied to all video tiles. For example if you click the 'pause' button, all video currently playing will be paused. If un-ticked only the currently selected tile will be paused.

Playback Control buttons

	 10sec, 30sec, 1min, 5min, 30min, 60min	 10sec, 30sec, 1min, 5min, 30min, 60min
Play / paused video	Jump back in time	Jump forward in time
		
Stop playback	Take snap shot of current frame (of selected frame)	Play forward 1 frame at a time

The 2 sliders on the bottom right of the Playback panel control the **speed** and **volume** of the currently selected camera tile. Moving the slider to the right increase speed moving slider to left decreases speed. Clicking on the running man icon  resets the speed to original encoding speed.





Note the maximum speed at which the video can be streamed is dependent on the speed of your network connection to the recording device and the load the recorder is currently under.

The volume slider controls the volume of the sound (If audio is being recorded on the currently selected camera)
The speaker icon when clicked will toggle between mute / un-mute.

Footage retention period

To find out what days have footage available for a particular camera/s follow these steps.

Tick the cameras you're interested then click the Search button  and select 'Search

Selected date then click the 'SELECT DATE' button. 

The dates with the **green** colour indicate footage is available for that date. Black colour indicates no footage is available. To navigate to the previous month/year by click the left arrows.

YEAR2013

MONTH10

TODAYWed, Oct 30, 2013

SUN

MON

TUE

WED

THU

FRI

SAT

1

2

3

4

5

6

7

8

9

10

11

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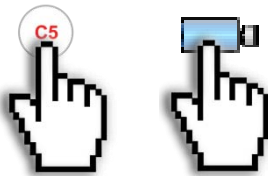
30

31



Using eMap to Playback Cameras

Note: eMap playback requires a configured eMap and dual monitors and appropriate user permissions.

To start E-Map click on the “eMap” button  this opens the E-map on the second monitor.



NOTE: The clickable or draggable region of the camera icon is the grey circle enclosing a **RED** number or on the **blue** camera icon.

Drag the **RED**  text representing the camera number or blue camera icon to the video tile you wish the video to appear in. The footage should then appear in the video tile you dragged the camera to and the icon should change to transparent red colour  indicating camera is being displayed.

Search footage using 'eMaps'

1 

2 

3 

4 

4 

Drag camera icon to empty tile

Drag RED camera number to tile

If you do not select a date, 'Today' date will be selected

Playing back footage from a recording device



Video tutorial at www.freedomvms.com/tutorials/playback



The last few pages of this manual contain 'Quick guides' which will assist you in performing common tasks. It's recommended you print these guides out and place them in the area where you normally use the CCTV system for quick access.

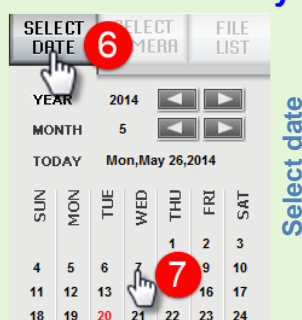
There are 3 methods for searching footage in Freedom which are

- Using **eMaps** → by dragging the red camera number from map to a tile.
- **'Search selected date'** which uses the **SELECT DATE** button and calendar (default date is today)
- **Search time period** which opens a time range selection box.

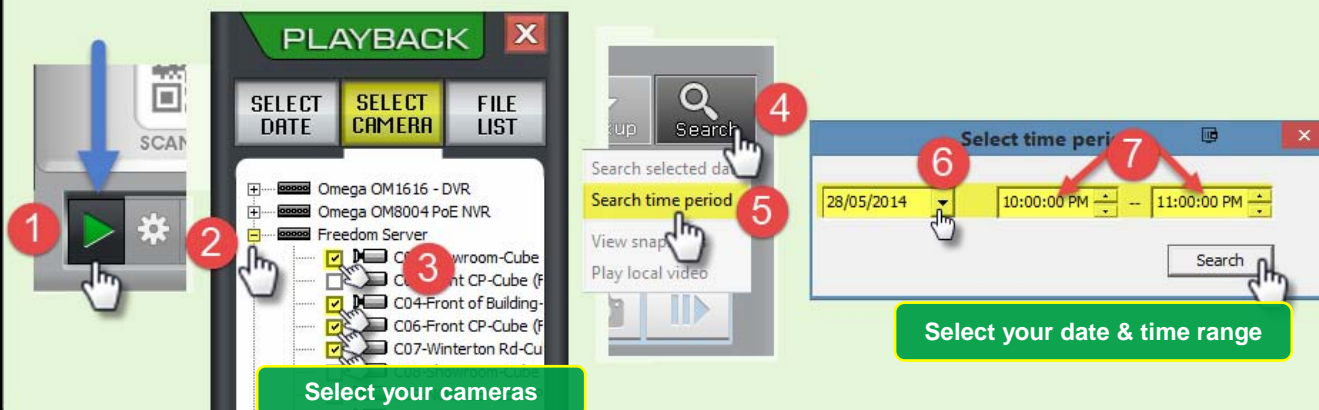
Search footage from 'Today'



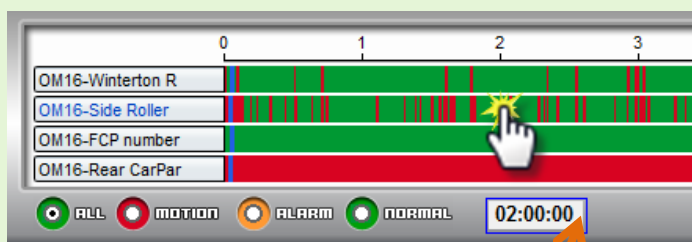
Select another day



Searching for footage on a selected date without eMaps



Navigating to a time on the time line

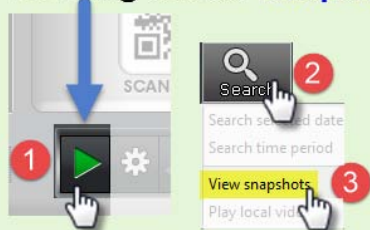


Double click the area on the timeline under the time you wish to go to.

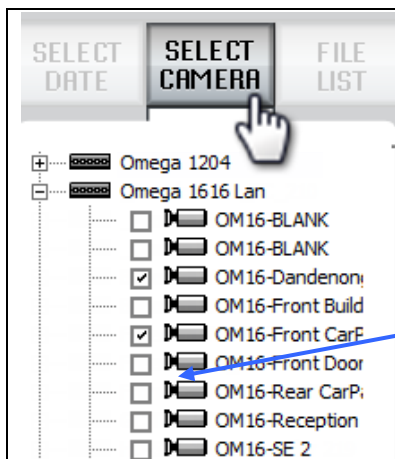
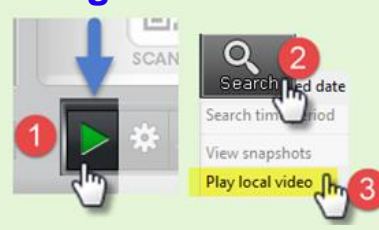
Each horizontal bar represents a 24hr period from a different camera

Use buttons to

Viewing saved Snapshots (pictures)



Reviewing downloaded footage



This button allows you to select what cameras you want to playback.' Camera selection should be your first task upon entering Freedom Server Playback.

To select a camera ;

1. Place a **tick** (click) in the box to the left of the camera you wish to playback. A maximum of four cameras can be selected at one time.

2. Click the **Search Button**.



3. Select "Search current Date to search today's footages OR select "**Search time period**" to enter another time range.

Selecting a Date



To select a date click 'Select Date' button and click the date you wish to select. Colour coded numeric days of the month are displayed, the meaning of each colour is listed below.

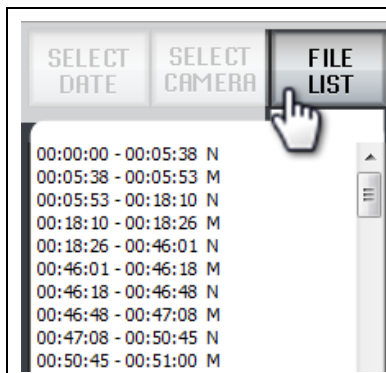
Use the icons to toggle between month/year.

Green = Footage available

Black = No footage available

Red = Currently selected date

Selecting a File from a list



To select a file from a list of available files for the time you have selected.

1. Make sure camera/s & date have been previously selected and you have pressed the '**Search**' button to obtain an index of available footage from your recording device.
2. Click on the '**File List**' button.
3. Select the tile you wish the footage to appear in.
4. Double click the file you wish to view.

Note: The file description indicates the time range of the footage and the letter at the end of the file indicates the type of recording it is.

'N' = Normal schedule recordings, 'M' = Motion recordings, 'A' = Alarm recordings.

Downloading & exporting footage

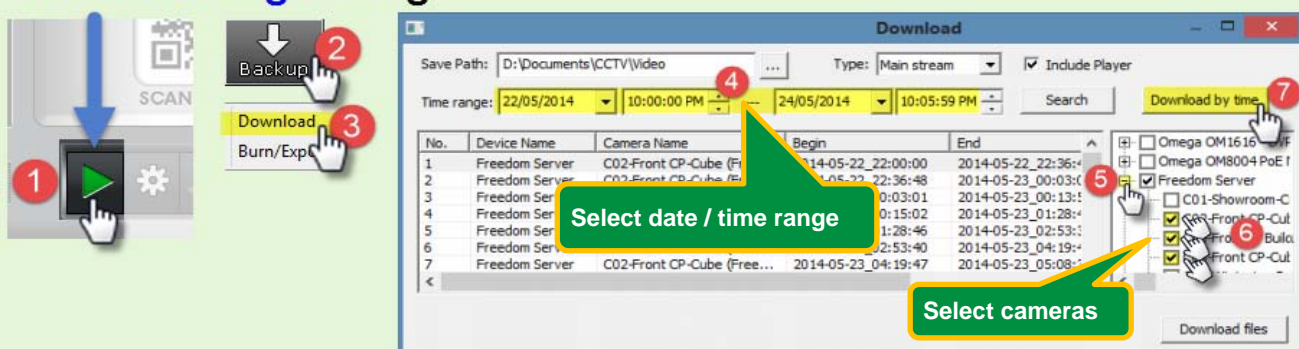


Note: you must have 'Footage download' rights to download footage. Tutorial at www.FreedomVMS.com/tutorials/backup

In Freedom VMS, backing up footage is a two-step process. You first download the footage you want to backup by using Freedom's **'Download'** module. You then use the **'Burn/Export'** module to either burn footage to Disc or export to a USB device.



Downloading footage



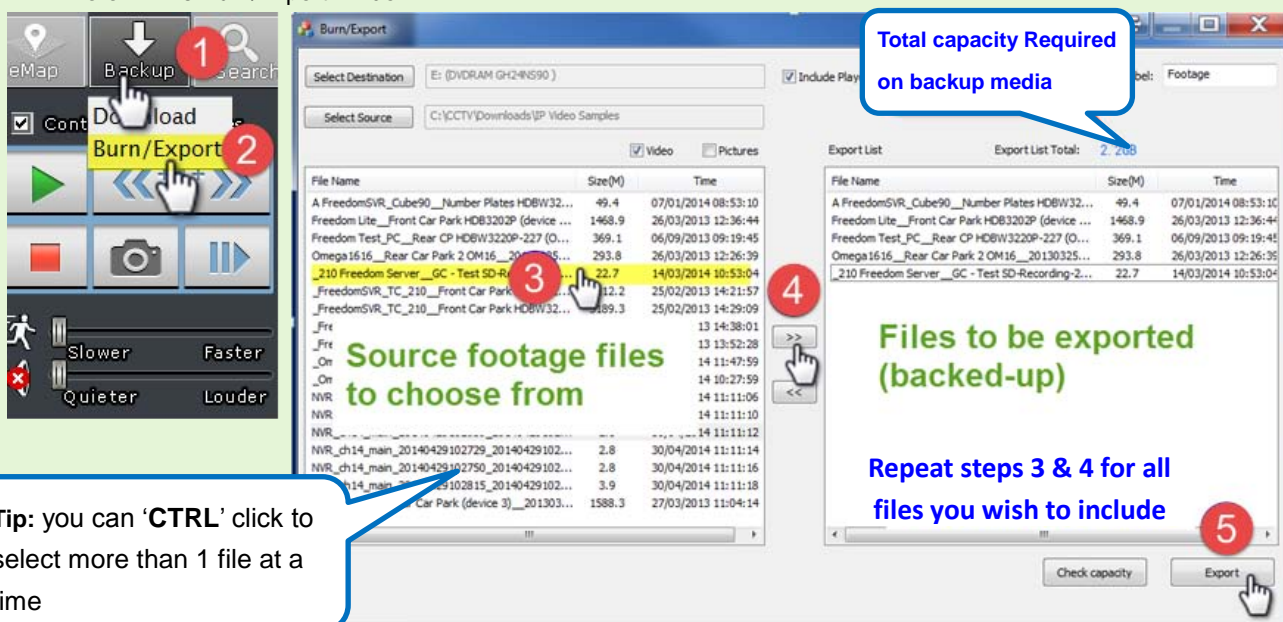
After download has completed, click 'OK' and close the window.

Burning / Exporting the footage (backup)

The second step in the backup process is the exporting of the footage you have just downloaded to a CD/DVD or USB device.

Here are some media options you have & their capacity: **CD~630MB, DVD~3.8GB, USB=4GB-4TB**

Below: The Burn/Export window.



Burn/Export Options & elements

- **Select Destination** → Allows you to select where you want to backup your footage, by default the CD/DVD drive is selected, but this can be changed to another destination for example a USB drive/stick.
- **Select Source** → Allows you to change the folder where Freedom looks for footage that can be backed up.
- **Includes Player** → Option to select if you want to include the 'Player' on the backup media (**ticked by default**)
- **Disk label** → The volume label that will be on the backup media.
- **Video / Picture** → Tick box allows you to filter source file types by video and /or Pictures.
- **Export List Total** → displays the total size of the 'Export list' use this as a guide for choosing appropriate media
- **Check capacity** → Check the health & capacity of your selected 'Destination' media (insert/ plugin media before use)
- **Export** → Starts the actual writing/burning process.


Replaying Footage previously downloaded or backed up

If you wish to review downloaded footage from your local Freedom download folder or any other source i.e. CD, USB that contains footage that has been backed up using the Freedom VMS software, you use what known as the 'Local Player' (Fig 10).



Video tutorial at www.freedomvms.com/player



The Local Player can be accessed by navigating to the Playback section  of Freedom and clicking on the 'Search' button and selecting "Play local video" from the list.

By default the Local player points to your default download folder (Fig 10A) you can change this so that it points to any drive or folder containing Freedom compatible footage like a backup CD or USB drive.

Tip: If the list contains too many files, it may be in indication that you need to delete some old footage from your download folder, using the 'File Manager' (See 'Managing your download folder')

To start playing the footage, double click the file you wish to play from the file footage window (Fig 10B) this will cause the footage to start playing in the main window.

File Naming Conventions

Recorded footage file names in Freedom VMS have the following conventions.

The example that will be used is "Maxima MRS__Dandenong Road__20130721_224500_20130721_231500"

Breaking this name down using colour illustrates the logical division of the name.

Maxima MRS__Dandenong Road__20130721_224500_20130721_231500

RED = Name of Recorder. **BLUE** = Camera/Channel name. **GREEN** = Start Date & Time **PURPLE** = End Date & Time

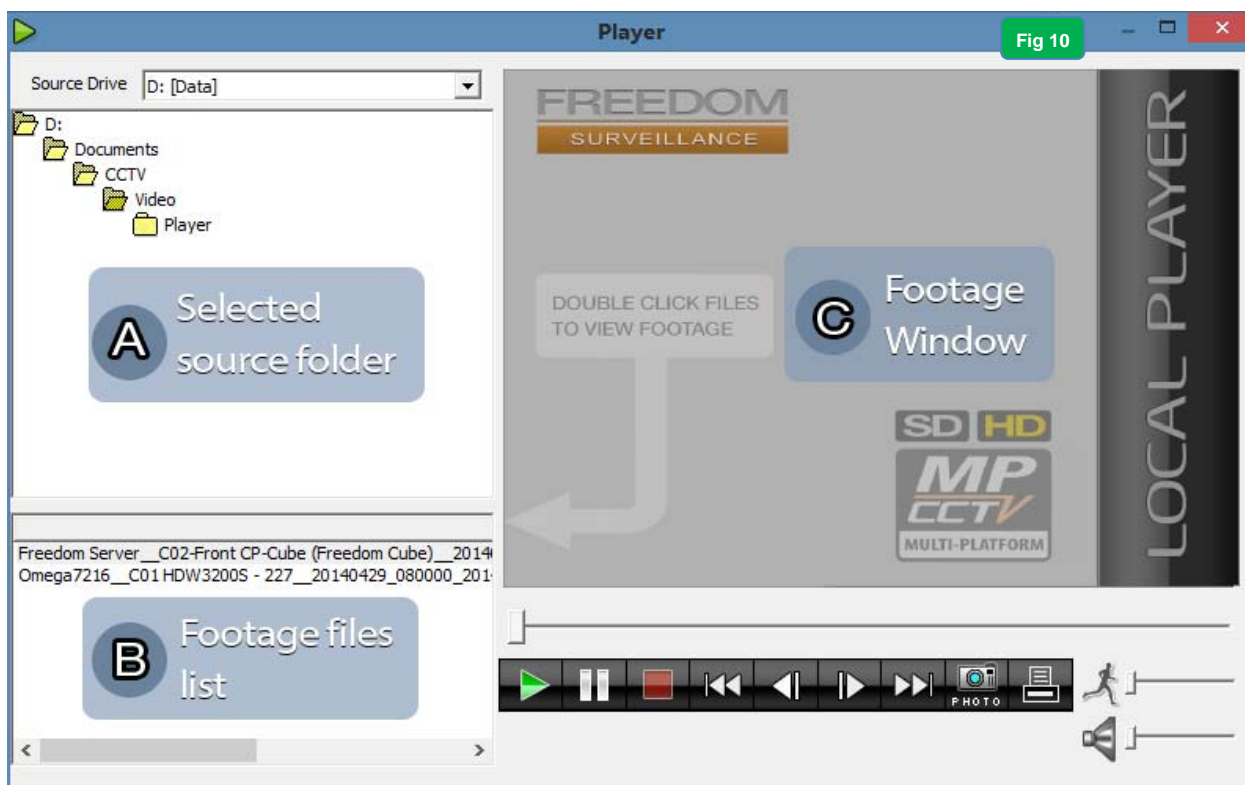
20130721 = is the start date (Date in reverse format YYYYMMDD) reading from right to left, converts to **21st July 2013**

224500 & 231500 (HHMMSS) [24hr mode] which equates to a range of 10:45PM to 11.15PM

Camera Naming Conventions

Camera names should only contain alphanumeric characters and no other special characters with the exception of the hyphen '-' and '_' underscore characters. **DO NOT use forward or backslashes.**

Local Player.



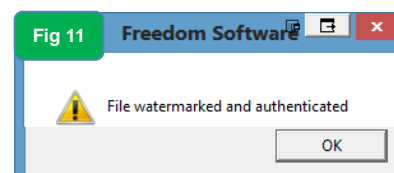
The Local Player (**Fig 10**) is used to review previously download footage from a recorder.

To find out what version of the Local Player you have 'right click' on the video tile and click 'version'.

Digital Zoom is also available in Local Player → refer to 'Using Digital Zoom' section for more information.

Validating Watermark

Watermark validation can be performed on footage recorded on Freedom Server recorders. To validate 'right click' on video tile and select 'Validate'. If file has not been tampered with you will get a 'File watermarked and authenticated' message as seen in **Fig 11**



Export to AVI

The Player contains an option to convert footage to AVI format, by 'right' clicking over the video area (**Fig 10 C**) and selecting 'AVI Convert'

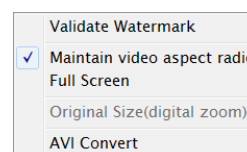


Fig 12 provides an overview of the button and controls for the Freedom Local Player.


- Speed control  → Dragging right **increases** speed, dragging to **left** decreases speed of playback .
Clicking the 'running man' icon returns playback to **normal speed**.
- Sound on/mute and volume control. (Clicking speaker icon toggles between mute/unmute)
- Print Current frame (This feature will be available in a future version)

Fig 12




Maintenance & Reporting

Managing your Download folder

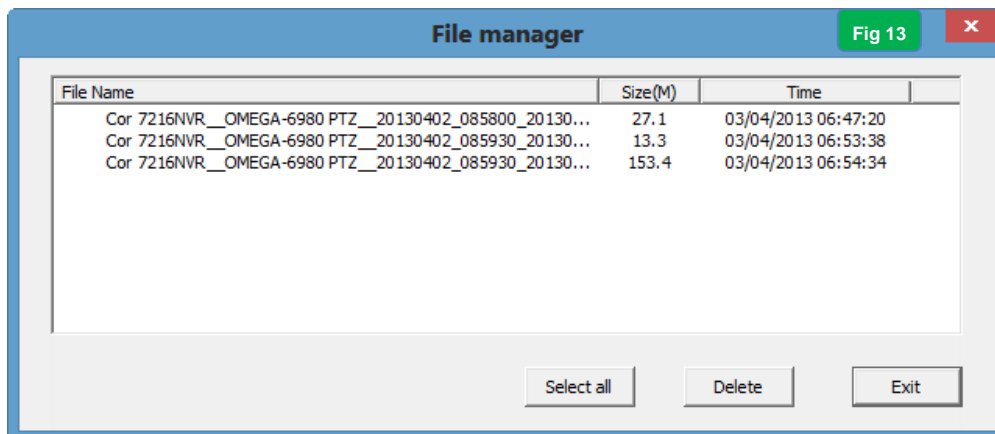
It's recommended you regularly clean up footage and pictures you have previously downloaded and backed-up, if you don't, footage accumulates and becomes un-manageable because the list becomes too large and time consuming to find the footage you just downloaded. The 'File Manager' section below describes how to delete old footage and pictures (snapshots.)

File Manager

The File manager allows you to quickly delete old downloaded footage files from your default download folder to free up space which makes future back-ups less complex (a smaller file list).

To delete old downloaded footage, from the Live view window click the 'menu'  icon, then click '**File manager**', this will open the File manager window (**Fig 13**).

Then either click the '**Select all**' button to select all downloaded footage files or CTRL-click to highlight selected files only, then click the '**Delete**' button.



Device Status

As the name suggests 'device status' allows you to quickly check on a devices status.

Click on the '**Up** arrow icon' then click '**Device Status**' then select the device you want to query from the drop-down list, then click the '**Scan**' button. Depending on the type of device selected the information that is returned can include:

- Hard disk drive capacity & remaining storage
- Status of Hard disk drive
- Whether camera (channel) is recording or lost

Device Status

Device:

HDD Capacity(GB):

HDD Remain Capacity(GB):

HDD Number	HDD Capacity(GB)	HDD Remain Capacity(GB)	HDD Status
1	1863.0	0	active
2	1863.0	0	sleep
3	2794.4	0	sleep

Channel Number	Record	Signal Status	Hardware Status	Network Link Number
channel 1	recording	normal	normal	0
channel 2	recording	normal	normal	0
channel 3	recording	normal	normal	0
channel 4	recording	normal	normal	0

Freedom Logs

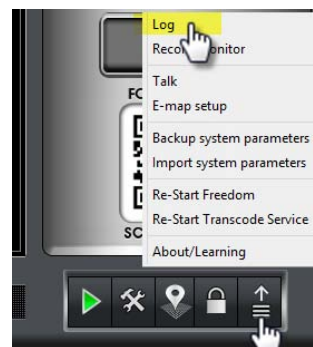
Freedom logs many events during normal operation as well as being able to retrieve logs from remote devices.

To view these logs click on the 'menu' icon on the main Liveview screen and select 'Log' from the menu.

To use the log you must first select the device you wish to view the logs of, the 'local system' device refers to the Freedom Server you are currently on. After selecting the device you must enter a time range to retrieve logs for then click the bottom most 'Search' button.

There are many filters you can apply to log search that aid in narrowing down the item/s you are looking for, including; A text search, operation and exception events.

These logs can also be exported as text files.



Device Log

Device: Filter by words:

Filter:

From: To:

Time	Log
2014-01-31 07:27:34	Remote user login: <admin> from <192.168.2.105>
2014-01-31 07:29:42	Remote user logout: <admin> from <192.168.2.105>
2014-01-31 09:22:19	User unlock: <tech>
2014-01-31 09:22:26	Setup
2014-01-31 12:43:39	User unlock: <tech>
2014-01-31 12:43:48	Software exit <tech>
2014-01-31 12:49:45	Software boots up
2014-01-31 12:49:46	Record start(schedule) <main> <C01-Showroom-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C01-Showroom-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <main> <C02-Front CP-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C02-Front CP-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <main> <C04-Front of Building-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C04-Front of Building-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <main> <C06-Front CP-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C06-Front CP-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <main> <C07-Winterton Rd-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C07-Winterton Rd-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <main> <C08-Showroom-Cube (Freedom Cube)>
2014-01-31 12:49:46	Record start(schedule) <sub> <C08-Showroom-Cube (Freedom Cube)>
2014-01-31 12:49:46	Group connect <admin>
2014-01-31 12:49:47	Record start(schedule) <main> <C09-Stair Well-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <sub> <C09-Stair Well-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <main> <C10-Reception Door (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <sub> <C10-Reception Door (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <main> <C11-Roof-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <sub> <C11-Roof-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <main> <C12-Roof-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <sub> <C12-Roof-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <main> <C13-Reception-Cube (Freedom Cube)>
2014-01-31 12:49:47	Record start(schedule) <sub> <C13-Reception-Cube (Freedom Cube)>
2014-01-31 12:49:48	Record start(schedule) <main> <C15-Receiving-Cube (Freedom Cube)>
2014-01-31 12:49:48	Record start(schedule) <sub> <C15-Receiving-Cube (Freedom Cube)>
2014-01-31 12:49:48	Record start(schedule) <main> <C16-TV-Cube (Freedom Cube)>
2014-01-31 12:49:48	Record start(schedule) <sub> <C16-TV-Cube (Freedom Cube)>
2014-01-31 12:49:49	Record start(schedule) <main> <C17-Sony IPC CH140v (Sony IPC CH140v5666)>
2014-01-31 12:49:50	Record start(schedule) <sub> <C17-Sony IPC CH140v (Sony IPC CH140v5666)>
2014-01-31 12:49:50	Record start(schedule) <main> <C18 Number Plates HDBW3202P-74 (OM-IP-HDBW3202P-74)>
2014-01-31 12:49:50	Record start(schedule) <sub> <C18 Number Plates HDBW3202P-74 (OM-IP-HDBW3202P-74)>


Backing up and restoring a Freedom configuration

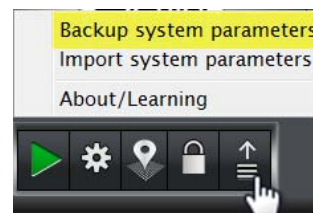
Backing up a Freedom software configuration.

A backup should be performed after any device or eMap modification.

This allows you to easily restore the configuration after a failure.

Performing a backup

1. From Live view click the 'menu' icon  and select "**Backup system parameters**"
2. Choose a location and name for the backup file.



Tip: Including the date of the backup in the filename is a good practice i.e. 'Sitename_DVR_20130720'
This backup should be stored in more than one place.


Importing a Freedom configuration from a backup

WARNING: This will erase all current configuration devices and data.

Note: When importing configurations containing eMaps from a Client to Client eMap hyperlinks are maintained.

when importing configurations from one Server to another Server eMap hyperlinks are NOT maintained, hyperlink will need to be re-associated with correct device-camera.

To restore a previously backed up Freedom Server configuration, follow these steps:

1. Open Freedom Server if it isn't already open.
2. In Live view click the menu icon 
3. Click '**Import system parameters**' from list.
4. Browse to the location of the backup file.
5. Click on the actual file then click '**Open**'.
6. You must **restart** the Freedom Server application for settings to take effect.

Upgrading Freedom to latest version

The latest version of Freedom Server can be obtained from your dealer. A video tutorial is available outlining the upgrade process.

Steps to upgrade

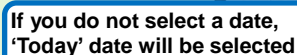
1. Backup current configuration
2. Uninstall current version
3. Install new version
4. Import backed up configuration into new version.



Video tutorial at www.freedomVMS.com/tutorials/upgrade



Drag **RED** camera number to tile



1. Click the play button icon.

2. Click the 'SELECT CAMERA' tab.

3. Check the checkbox for 'C04-Front of Building'.

4. Click the 'Search' button.

5. Click the 'Search time period' button.

6. Select the date '28/05/2014'.

7. Select the time range '10:00:00 PM' to '11:00:00 PM'.

Select your date & time range

Example on left takes us to '2:00am' on the timeline on 'Side Roller' camera

The diagram illustrates the steps to view snapshots in the 'Search' menu:

1. Click the play button (green triangle) in the bottom left corner of the main interface.
2. Click the 'Search' button (magnifying glass icon) in the top right corner.
3. Click the 'View snapshots' option in the search menu.

Backing up Footage – Visual Step by Step

Video tutorial at www.FreedomVMS.com/backup

Backing up footage is a two-step process, first **download** the footage you want to backup, then **Burn/Export** the downloaded footage to CD/DVD or USB device



1

Downloading footage

1: Click the Download button in the main interface.

2: Click the Backup button in the Download window.

3: Click the Download button in the Download window.

4: Select date / time range.

5: Select cameras.

6: Check the checkbox for the camera you want to download.

7: Click the Download by time button.

No.	Device Name	Camera Name	Begin	End
1	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-22_22:00:00	2014-05-22_22:36:48
2	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_00:03:01	2014-05-23_00:03:01
3	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_01:28:46	2014-05-23_01:28:46
4	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_02:53:40	2014-05-23_02:53:40
5	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_04:19:47	2014-05-23_04:19:47
6	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_05:00:00	2014-05-23_05:00:00
7	Freedom Server	C02-Front CP-Cube (Fr...	2014-05-23_05:00:00	2014-05-23_05:00:00

After download has completed you will see a pop-up stating, download has completed, click 'OK' and then close the window.

2

Burning / Exporting the footage (backup)

The second step in the backup process is the exporting of the footage you have just downloaded to a CD/DVD or USB device. The following are the backup media options and their capacities: **CD=~630MB, DVD=~3.8GB, USB=4GB-4TB**

Below: The Burn/Export window.

1: Click the Burn/Export button in the main interface.

2: Click the Burn/Export button in the Burn/Export window.

3: Select source footage files to choose from.

4: Select files to be exported (backed-up).

5: Click the Export button.

Tip: you can 'CTRL' click to select more than 1 file at a time

Total capacity Required on backup media

Export List Total: 2,208

File Name	Size(M)	Time
A FreedomSVR_Cube90_Number Plates HDBW32...	49.4	07/01/2014 08:53:10
Freedom Lite_Front Car Park HDB3202P (device ...	1468.9	26/03/2013 12:36:44
Freedom Test_PC_Rear CP HDBW3220P-227 (O...	369.1	06/09/2013 09:19:45
Omega1616_Rear Car Park 2 OM16_20130325...	293.8	26/03/2013 12:26:39
_210 Freedom Server_GC - Test SD-Recording-2...	22.7	14/03/2014 10:53:04
_FreedomSVR_TC_210_Front Car Park HDBW32...	12.2	25/02/2013 14:21:57
_FreedomSVR_TC_210_Front Car Park HDBW32...	189.3	25/02/2013 14:29:09
_Fre	13 14:38:01	
_Fre	13 13:52:28	
_On	14 11:47:59	
_On	14 10:27:59	
NVR	14 11:11:06	
NVR	14 11:11:10	
NVR	14 11:11:12	
NVR_ch14_main_20140429102729_20140429102...	2.8	30/04/2014 11:11:14
NVR_ch14_main_20140429102750_20140429102...	2.8	30/04/2014 11:11:16
NVR_ch14_main_20140429102815_20140429102...	3.9	30/04/2014 11:11:18
NVR_ch14_main_20140429102815_20140429102...	1588.3	27/03/2013 11:04:14

Playing back footage from today using Freedom VMS (V3.3)



1

2

PLAYBACK

select (tick) cameras
(max 4)

3

PLAYBACK

Search selected date
Search time period
View snapshots
Play local video

4

PLAYBACK

Double click the area on the timeline you wish to playback, on the row corresponding to your desired camera. In the example above 4am is selected as the time & camera labeled "Dandenong Road".

Playing back footage from another date using Freedom software

1

Repeat steps
1 & 2
from above

2

PLAYBACK

Search selected date
Search time period
View snapshots
Play local video

3

PLAYBACK

Enter Date & time range
you wish to playback,
then click OK

4

PLAYBACK

Navigating to a time

Each horizontal bar represents a 24hr period from a different camera. **Double click** the area on the timeline you wish to playback, on the row corresponding to your desired camera. In the example above 4am is selected as the time & camera labeled "Dandenong Road".



Playing back footage from today using eMaps

V3.3



1

2

3

4

5

If you wish to select a different map. Double click the button representing the map. (usually on top right)

Or right click over map area and select 'Switch map'

Drag camera number icon (C5) from e-Map to one of the video tiles on the left.

Navigating to a time

Each horizontal bar represents a 24hr period from a different camera.

Double click the area on the timeline you wish to playback, on the row corresponding to your desired camera.

In the example above 4am is selected as the time & camera labeled "Dandenong Road".

Playing back footage from another date using eMaps

1

2

3

4

5

Select a date. green indicates footage is available

Drag camera number icon (C5) from e-Map to one of the video tiles on the left.

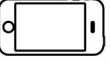
Navigating to a time

Each horizontal bar represents a 24hr period from a different camera.

Double click the area on the timeline you wish to playback, on the row corresponding to your desired camera.

In the example above 4am is selected as the time & camera labeled "Dandenong Road".

This document is for **DUAL** monitor setups (turn over for single monitor setups)



Backing up to CD/DVD or USB using Freedom VMS (V3.3)



Note: If you are using Windows XP the maximum size of a **SINGLE** file that can be burned to DVD is 2GB if no single file exceeds this limit you may burn up to 3.7GB on typical DVD, if a file does exceed 2GB you must use a USB device for the backup.

1

2

3

4

5

6

After download has complete a message will appear indicating completion.

You may then click **OK** and **EXIT** the Download footage window by clicking on the close icon

7

8

9

10

11

The disc includes a self executable player and will automatically play on PC's that have autorun enabled, otherwise navigate to your CD drive and double click the file named " **Autorun.bat** " Video

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tutorials

